Oil, Paint and Drug Reporter

The Market Authority Since 1871

12 GOLD STREET — Chemicals - Dyestuffs - Drugs - Paints - Oils - Fertilizers — NEW YORK, N.Y.

April 17, 1933

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Oil, Paint and Drug Reporter

The Market Authority Since 1871
Chemicals-Dyestuffs-Drugs-Paints-Oils-Fertilizers

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Late Market News

London Closing Cable

LONDON, Apr. 13, 1933.

Carnauba wax was 6d lower at 75s per hundredweight. Stocks of shellac on April totaled 16,302 packages of which quantity 34,699 packages were orange shellac.

Miscellaneous Oils Quiet

Chinawood oil was quiet at the weekend but offerings were light and the market remained steady. Tallow was firm in the absence of any increase in offerings, although the inquiry was rather slow. Linseed oil was firm at the advance previously noted with trade quiet, buyers being inclined to hold off for further developments in the situation. The general list of animal, vegetable and fish oils, fats and greases was quiet with the tone steady.

Drug Markets Quiet

Drug markets were quiet at the close of last week. Trading was checked on Good Friday when many houses closed at noon. Those that remained open had skeleton staffs in most instances. Import houses were at a standstill owing to the closing of practically foreign markets selling merchandise on prices made in sterling exchange. Revival of commerce in such materials will not take place until Tuesday.

Tin Oxide Higher

Price for tin oxide was advanced 1c. per pound at 30½c. to 31½c. per pound, according to quantity, at the close of the week. Tin tetrachloride was firm at 13.95c. to 14.45c. per pound. Strength in the tin derivatives reflected the strong tone in the basic metal last week. Straits tin advanced 40 points last week, being quoted at 25.90c. per pound. Antimony metal was dull, with a price of 5.65c. per pound prevailing.

Sulphate of Ammonia Up

Leading sellers of domestic sulphate of ammonia advanced quotations Friday. The market was held firm at $21 per ton, ex-vessel, at Northern ports, and $23 per ton, f.o.b. Southern ports. The Northern market price is lower than some recent quotations but the price for the South represents an advance of $1 per ton. Following this movement there were rumors that nitrate of soda would be advanced correspondingly but up to a late hour neither importers nor domestic sellers altered prices.

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Current Market Quotations

When not otherwise indicated, quotations are spot (f.o.b. New York) prices on large lots. Price changes and trends are noted in the market reports on other pages, with other informative comment. The locations of the several reports are indicated on page 2.

A

Acacia (see Gum, Arabic)			
Acetaldehyde, drums	lb.	.18½@	.21
Acetamide, C. P., works, bottles, kegs	lb.	.95 @	1.35
Acetanilide, technical, 95 p.c., barrels	lb.	.24	Nom.
U.S.P., barrels	lb.	.26 @	.28
Acetin, technical, drums	lb.	.30 @	.32
Acetone, drums, car lots	lb.	.08½@	.09
less car lots	lb.	.09½@	—
tanks	lb.	.08 @	—
Methyl (see M)			
Oil, barrels	gal.	1.15 @	1.50
Acetophenone, bottles	lb.	1.50 @	2.30
Acetphenetidin, kegs	lb.	1.20 @	1.25
Acid:—			
Abietic, barrels	lb.	.06 @	—
Acetic, commercial, 28 p.c., barrels	100 lbs.	2.65 @	2.90
carboys	100 lbs.	3.15 @	3.40
56 p.c., barrels	100 lbs.	5.00 @	5.25
carboys	100 lbs.	5.50 @	5.75
60 p.c., barrels	100 lbs.	5.34 @	5.59
carboys	100 lbs.	5.84 @	6.09
70 p.c., barrels	100 lbs.	6.23 @	6.48
carboys	100 lbs.	6.73 @	6.98
80 p.c., barrels	100 lbs.	7.11 @	7.36
carboys	100 lbs.	7.61 @	7.86
84 p.c., barrels	100 lbs.	7.47 @	7.83
carboys	100 lbs.	7.97 @	8.45
glacial, natural, U.S.P., barrels	100 lbs.	9.14 @	9.39
carboys	100 lbs.	9.64 @	9.89
synthetic, 99½ p.c., aluminum drums, cans, car lots	100 lbs.	9.14 @	—
less car lots	100 lbs.	9.39 @	—
U.S.P. reagent, 99.8 p.c., carboys, car lots	100 lbs.	9.64 @	—
less car lots	100 lbs.	9.89 @	—
pure, 30 p.c., barrels	100 lbs.	3.74 @	3.99
carboys	100 lbs.	4.24 @	4.49
36 p.c., barrels	100 lbs.	4.21 @	4.46
carboys	100 lbs.	4.71 @	4.96
60 p.c., barrels	100 lbs.	7.06 @	7.31
carboys	100 lbs.	7.56 @	7.81
80 p.c., barrels	100 lbs.	8.90 @	9.15
carboys	100 lbs.	9.40 @	9.65
redistilled, 28 p.c., barrels	100 lbs.	2.93 @	3.18
carboys	100 lbs.	3.43 @	3.68
56 p.c., barrels	100 lbs.	5.55 @	5.80
carboys	100 lbs.	6.05 @	6.30
60 p.c., barrels	100 lbs.	5.94 @	6.19
carboys	100 lbs.	6.44 @	6.69
70 p.c., barrels	100 lbs.	6.99 @	7.43
carboys	100 lbs.	7.49 @	7.93
80 p.c., barrels	100 lbs.	7.90 @	8.15
carboys	100 lbs.	8.40 @	8.65
Acetic anhydride, drums	lb.	.21 @	.25
Acetylsalicylic, barrels	lb.	.70 @	.75
Animal, fatty, drums	lb.	.03¾@	.04¼
Anthranilic, refined, barrels	lb.	.85 @	.95
technical, barrels	lb.	.75 @	—
Arsenous, technical (see Arsenic, White).			
U.S.P., pwd., drums, kegs	lb.	.18 @	—
Benzoic, technical, kegs	lb.	.40 @	—
U.S.P., kegs	lb.	.48 @	.52
Battery, carboys	100 lbs.	1.60 @	2.50
Boric, technical, 99½ p. c., granular, contracts, minimum 80 tons, delivered, sacks	ton.	80.00 @	—
barrels	ton.	90.00 @	—
car lots, delivered, sacks	ton.	85.00 @	—
barrels	ton.	95.00 @	—
less car lots, ex warehouse, sacks	ton.	90.00 @	95.00
barrels	ton.	100.00 @	105.00
powdered, contracts, minimum 80 tons, delivered, sacks	ton.	85.00 @	—
barrels	ton.	95.00 @	—
car lots, delivered, sacks	ton.	90.00 @	—
barrels	ton.	100.00 @	—
less car lots, ex warehouse, sacks	ton.	95.00 @	110.00
barrels	ton.	105.00 @	119.00
U.S.P. $15 per ton higher.			
Broenner's, barrels	lb.	1.16 @	1.21
Butyric, 60 p.c., tech., works, carboys	lb.	.28 @	—
95 p.c., w.w., works, carboys	lb.	.70 @	—
edible grade, works, cbys	lb.	1.30 @	—
Camphoric, cans	lb.	5.25 @	—
Carbolic (see Phenol).			
Chlorosulphonic, drums	lb.	.04½@	.05½
Chromic, 99 p.c., drums included	lb.	.11½@	.14
Cinnamic, refined, bottles	lb.	2.85 @	3.25
Citric, crystals, barrels	lb.	.29 @	—
kegs	lb.	.29½@	—
granular, barrels	lb.	.29 @	—
kegs	lb.	.29½@	—
powdered, barrels	lb.	.29½@	—
anhydrous, granular, drums, lb.		.32 @	—
powder, drums	lb.	.32½@	—
Cleve's, barrels	lb.	.52 @	.54
Coconut oil, mills, tanks	lb.	.04½	Nom.
Corn oil, mills, tanks	lb.	.03½	Nom.
Cottonseed oil, mills, barrels	lb.	.03¾	Nom.
Cresylic, 95-97 p.c., dark, drums	gal.	.37 @	.39
97-99 p.c., pale, drums	gal.	.40 @	.43
Diethylbarbituric (see Barbital).			
Formic, domestic, 90 p.c., car lots, carboys	lb.	.10½@	.11
less car lots, carboys	lb.	.11½@	.12½
imported, carboys	lb.	.12½@	.14
Gallic, technical, barrels	lb.	.60 @	.65
U.S.P., barrels	lb.	.74 @	—
Gamma, barrels	lb.	.77 @	.79
Gluconic, technical, 50 p.c., concentration, 500-lb. barrels, lb.		.20 @	—
H, barrels	lb.	.65 @	.70
Hydriodic, U.S.P., 10 p.c. diluted, carboys	lb.	.50 @	.51
Hydrobromic, U.S.P., 10 p.c. diluted, carboys	lb.	.18 @	.20
Hydrochloric (see muriatic).			
Hydrocyanic, works, cyl	lb.	.80 @	1.30
Hydrofluoric, 30 p.c., barrels	lb.	.06 @	.06½
lead carboys	lb.	.08 @	.08½
48 p.c., lead carboys	lb.	.10 @	10½
52 p.c., lead carboys	lb.	.11 @	11½
60 p.c., lead carboys	lb.	13 @	.13½
Hydrofluosilic, 35 p.c., barrels	lb.	.11 @	.12
Hypophosphorus, U.S.P., 30 p.c. demijohn	lb.	.75 @	—
Lactic, 22 p.c., dark, barrels	lb.	.04 @	.04½
light, refined, barrels	lb.	.05½@	.06½
44 p.c., dark, barrels	lb.	.09 @	.09½
light, refined, barrels	lb.	.11½@	.12
U.S.P. X, 85 p.c., carboys	lb.	.47 @	—
U.S.P. VIII, 75 p.c., carboys, lb.		.45 @	—
Acid, laurent's, barrels	lb.	.36 @	.37
Maleic, crystals, kegs	lb.	.35 @	—
Malic, powdered, kegs	lb.	.45 @	.60
Mixed, tanks, nitric unit	lb.	.06½@	.07½
tanks, sulphuric, unit	lb.	.0085@	.009
Monochloracetic, tech., bbls.	lb.	.16 @	.18
99 p.c., barrels	lb.	.18 @	.20
Monosulphonic, barrels	lb.	1.50 @	1.60
Muriatic, 18 deg., tanks, works, 100 lbs.		1.00 @	—
carboys, car lots, works, 100 lbs.		1.35 @	—
truckloads, del'd	100 lbs.	1.60 @	—
20 deg., tanks, works	100 lbs.	1.10 @	—
carboys, car lots, works, 100 lbs.		1.45 @	—
truckloads, del'd	100 lbs.	1.70 @	—
22 deg., tanks, works	100 lbs.	1.60 @	—
carboys, car lots, works, 100 lbs.		1.95 @	—
truckloads, del'd	100 lbs.	2.20 @	—
chemically pure, carboys	lb.	.06 @	.07
6-lb. bottle	lb.	.08 @	.11
Neville & Winther's, barrels	lb.	.85 @	.87
Nitric, 36 deg., carboys, car lots, works	100 lbs.	5.00 @	—
truckloads, del'd	100 lbs.	5.25 @	—
38 deg., carboys, car lots, works	100 lbs.	5.50 @	—
truckloads, del'd	100 lbs.	5.75 @	—
40 deg., carboys, car lots, works	100 lbs.	6.00 @	—
truckloads, del'd	100 lbs.	6.25 @	—
42 deg., carboys, car lots, works	100 lbs.	6.50 @	—
truckloads, del'd	100 lbs.	6.75 @	—
chemically pure, carboys	lb.	.11 @	.12
7-lb. bottles	lb.	.12 @	.22
Oleum (see sulphuric fuming)			
Oxalic, domestic, barrels	lb.	.11 @	.11¼
imported, barrels	lb.	.11¾@	.12⅛
Para-aminobenzoic, freight allow, barrels	lb.	1.20 @	1.30
Phenylacetic, bottles	lb.	2.50 @	3.50
Phenylcinchoninic (see Cinchophen).			
Phosphoric, U.S.P., 50 p.c. (spec. grav., 1.347), carboys, demijohns	lb.	.14 @	—
10 p.c., diluted, U.S.P., carboys, demijohns	lb.	.08½@	.09
85 p.c., syrupy, U.S.P., (spec. grav. 1.710), demijohns	lb.	.14 @	.15
89 p.c. (spec. grav. 1.750), demijohns	lb.	.15 @	.16
technical, 50 p.c., carboys,	lb.	.06 @	.08
75 p.c., carboys	lb.	.10½@	.12
Picramic, kegs	lb.	.65 @	.70
Picric, car lots, barrels	lb.	.30 @	—
less car lots, barrels	lb.	.35 @	.40
Propionic, 98 p.c., works, drums	lb.	.35 @	—
Pyrogallic, crystals, cans	lb.	1.40 @	1.50
resublimed, cans	lb.	1.75 @	1.80
Ricicleic	lb.	.28 @	—
Salicylic, technical, barrels	lb.	.40 @	—
U.S.P., barrels	lb.	.40 @	.45
Sebacic, technical, works, barrels	lb.	.58 @	—
Stearic, distilled or saponified, double pressed, bags	lb.	.08 @	.08½
single pressed, bags	lb.	.07½@	.08
triple pressed, bags	lb.	.10¾@	.11¼
Sulphanilic, C.P., works, bottles	lb.	1.50 @	2.00
technical, works, drums	lb.	.15 @	.17
Sulphuric, 60 deg., tanks	ton.	11.00 @	—
66 deg., tanks	ton.	15.50 @	—
carboys, car lots	100 lbs.	1.35 @	—
truckloads, del'd	100 lbs.	1.60 @	—
98 p.c., tanks	ton.	16.50 @	—
chemically pure, carboys	lb.	.06 @	.07
9-lb. bottles	lb.	.08 @	.17
fuming (oleum), 20 p.c., tanks,	ton.	18.50 @	—
Tannic, technical, barrels	lb.	.23 @	.40
U.S.P., fluffy, barrels	lb.	.83 @	.88
Tartaric, U.S.P., domestic, crystals, barrels	lb.	.20 @	—
kegs	lb.	.20½@	—
powdered and granular, barrels	lb.	.20 @	—
imported, crystals, kegs	lb.	.20 @	—
Tobias, barrels	lb.	.75 @	.77½
Trichloracetic, bottles	lb.	2.00 @	2.75
Tungstic, technical, barrels	lb.	1.40 @	1.70
chemically pure, kegs	lb.	3.60 @	4.00
Aconite leaves, bales	lb.	.09 @	.10
Root, bales	lb.	.12 @	.13
Aconitine alkaloid, amorphous, vials	oz.	17.00 @	—
crystals, vials	oz.	29.00 @	—
Adeps lanae anhyd., drums	lb.	.15 @	.16
hydrous, drums	lb.	.14 @	.15
Agar agar, No. 1, bales	lb.	.39 @	.41
No. 2, bales	lb.	.36 @	.38
No. 3, bales	lb.	.24 @	.26
Agaric, white, bales	lb.	.22 @	.28
Albumen:—			
Blood, dark, c.a.f., bags	lb.	.10 @	.17
light, c.a.f., barrels	lb.	.35 @	.43
Egg, edible, domestic, bbls,	lb.	.73 @	.74
imported, cases	lb.	.74 @	.76
Milk, ground, carloads, sacks	ton.	No stocks	
unground, carloads, sacks	ton.	No stocks	
Vegetable, edible, works, barrels	lb.	.65 @	.70
Alcohol:—			
Amyl, normal (see also Fusel oil, refined), from pentane, car lots, del'vd, drums	lb.	.15 @	—
less car lots, delivered, drums	lb.	.157 @	—
tanks, delivered	lb.	.143 @	—
secondary, car lots, freight allowed, drums	lb.	112 @	—
less car lots, freight allowed, drums	lb.	.117 @	—
tanks, freight allowed	lb.	.102 @	—
Benzyl, bottles	lb.	.67 @	1.15
Butyl, normal, works, tanks	lb.	.113 @	—
car lots, works, drums	lb.	.123 @	—
less car lots, wks., drums	lb.	.128 @	—
less than 50 gals., works, drums	lb.	.21¼@	—
secondary, car lots, drums	lb.	.10 @	—
tanks, works	lb.	.09 @	—
Capryl, pure, works, drums	lb.	2.50 @	—
technical, works, drums	lb.	.85 @	—
Cinnamic, bottles	lb.	2.60 @	3.25
Denatured, anhydrous, frt. alld. E. of Miss., car lots, drums	gal.	.54 @	—
less car lots, drums	gal.	.58 @	—
tanks	gal.	.50 @	—
completely, No. 5, revised, 188 proof, car lots, works, drums	gal.	.55½@	—
less car lots, drums	gal.	.44½@	.46¼
Alcohol, denatured, special, No. 1, 190 proof, works, barrels	gal.	.376 @	.454
drums	gal.	.346 @	.426
tanks	gal.	.304 @	—
Diacetone, tanks, contract	lb.	.15½@	—
spot, tanks	lb.	.16¾@	—
pure, tanks	lb.	.17¾@	—
Ethyl, 190 proof, from molasses, car lots, barrels, gal.		2.44½@	—
drums	gal.	2.41½@	—
less car lots, barrels, gal.		2.56½@	2.58½
drums	gal.	2.53½@	2.55½
tanks	gal.	2.37½@	—
(from grain, 5c. higher)			
absolute, drums	gal.	4.70 @	4.90
Isoamyl, primary, works, can.	gal.	4.00 @	4.50
Isobutyl, refined, works, drums	gal.	.75 @	—
Isopropyl, refined, 91 p.c., drums	gal.	.50 @	—
98 p.c., drums	gal.	.85 @	—
Methyl (see Methanol).			
Phenylethyl, bottles	lb.	4.15 @	4.40
Propyl, normal, refined, works, drums	gal.	.75 @	—
Aldehol, denaturing grade, works, drums or tanks	gal.	.70 @	.82
Aldol, tech., car lots, drums	lb.	.27 @	—
less car lots, drums	lb.	.31 @	—
Aletris, root, bags	lb.	.15 @	.18
Alizarin red (see Red, alizarin).			
Alkanet, root, bags	lb.	.07 @	.08
Aloe, Barbadoes, true, cases	lb.	.85 @	.90
Cape, cases	lb.	.08¼@	.08¾
Curacao, cases	lb.	.09 @	.09½
gourds, barrels	lb.	.48 @	.50
Socotrine, kegs	lb.	.28 @	.29
Aloin, barrels, cans	lb.	.72 @	.77
Alphanaphthol, refined, barrels, lb.		.80 @	.85
technical, barrels	lb.	.65 @	.70
Alphanaphthylamine, barrels	lb.	.33 @	.34
Althea root, cut, cases	lb.	.14 @	.16
Alum:—			
Ammonia, burnt, U.S.P., barrels	lb.	.16 @	.17
ground, barrels	100 lbs.	3.00 @	3.25
lump, barrels	100 lbs.	3.00 @	3.25
powder, barrels	100 lbs.	3.25 @	3.50
Ammonia-chrome, barrels	lb.	.04¾@	.05¼
Potash, ground, barrels	100 lbs.	3.00 @	3.25
lump, barrels	100 lbs.	3.00 @	3.25
powder, barrels	100 lbs.	3.25 @	3.50
Potash-chrome, barrels	lb.	.04½@	.05½
Soda, barrels	lb.	.04 @	.04¼
Alumina chloride, anhydrous, commercial, works, drums extra, 140 to 875 lbs	lb.	.09 @	—
1,100 to 5,000 lbs	lb.	.08 @	—
5,500 to 11,000 lbs	lb.	.07 @	—
12,100 to 33,000 libs	lb.	.06 @	—
40,000 lbs. and up	lb.	.05 @	—
crystals, commercial, car lots, works, drums	lb.	.06½@	.07
solution, works, drums	lb.	.03 @	.03½
Hydrate, heavy, barrels	lb.	.06½@	.06¾
light, barrels	lb.	.15 @	.16½
Oleate, precipitated, bbls	lb.	.16½@	.16¾
Palmitate precipitated, bbls.lb.		.16 @	.17
Resinate, precipitated, bbls.lb.		.12½@	.14
Stearate, precipitated, bbls.lb.		.14½@	.17
car lots, barrels	lb.	.14 @	—
Sulphate, commercial, car lots, works, bags, barrels. 100 lbs.		1.25 @	1.40
less car lots, works, bags, barrels	100 lbs.	1.50 @	1.65
iron-free, car lots, works, bags, barrels	100 lbs.	1.90 @	2.05
less car lots, works, bags, barrels	100 lbs.	2.40 @	3.30
Aluminum, 98-99 p.c. virgin, powdered (see Bronze powder).	lb.	.2290@	—
Ambergris, gray, tins	oz.	26.00 @	35.00
Amidopyrine, cans	lb.	4.00 @	4.10
Ammonia, anhydrous, commercial, tanks (50,000 lbs.)	lb.	.03 @	—
pure, cylindere	lb.	.15½@	.21½
Acetate, kegs	lb.	.26 @	.35
Aldehyde, drums	lb.	.65 @	.70
Aqua, 26 deg., carboys	lb.	.05½@	—
car lots, drums	lb.	.02½@	—
less car lots, drums	lb.	.02¾@	—
tanks (on NH_3 content)	lb.	.05 @	—
tankwagon		.0240@	—
Bicarbonate, car lots, works, barrels	100 lbs.	5.15 @	—
less car lots, barrels	100 lbs.	5.73 @	—
Bifluoride, barrels	lb.	.14½@	.17
Borate, barrels, kegs	lb.	.35 @	.35½
Bromide, granular, barrels	lb.	.35 @	.36
Carbonate, tech., domestic, barrels	lb.	.08 @	.12½
imported, casks	lb.	.08 @	.12½
U.S.P., lump, barrels	lb.	.09 @	.10
casks	lb.	.08 @	—
powder, barrels	lb.	.10 @	.11
Chloride, technical (see Ammoniac, sal).			
U.S.P., granular, barrels	lb.	.13 @	.14
Citrate, kegs	lb.	.80 @	.85
Fluoride, barrels	lb.	.17 @	.19
Hypophosphite, barrels	lb.	1.00 @	1.10
Iodide, jars	lb.	3.65 @	3.70
Laurate	lb.	.10 @	—
Linoleate, 80 p.c., anhydrous, barrels	lb.	.11 @	—
Naphthenate	lb.	.11 @	—
Nitrate, technical, casks	lb.	.07 @	—
Oleate, barrels	lb.	.10 @	—
Oxalate, neutral, crystals, powder, barrels	lb.	.22 @	—
pure, crystals, barrels, kegs, lb.		.23 @	.30
Persulphate, kegs	lb.	.20 @	.22½
Phosphate, dibasic, N.F., barrels	lb.	.35 @	.37
technical, barrels	lb.	.08½@	.11½
monobasic, pure, barrels	lb.	.40 @	.42
technical, barrels	lb.	.08½@	.11½
Ricinoleate	lb.	.15 @	—
Salicylate, U.S.P., kegs	lb.	1.15 @	1.20
Sulphate, domestic, ex-vessel at ports, Apr.-June delivery, bulk	ton.	21.00 @	23.00
200-lb. bags	ton.	24.00 @	—
100-lb. bags	ton.	25.00 @	—
export, f.a.s. New York, double bags	ton.	No prices	
imported, c.i.f. Atlantic ports, May shipment, bulk	ton.	20.00 @	20.50
bags	ton.	22.00 @	22.50
spot or nearby, resale, bulk	ton.	21.00 @	22.00
Sulphocyanide, kegs	lb.	.36 @	.48
Ammoniac (see Gum, ammoniac).			
Ammoniac, sal, gray, domestic, car lots, barrels	100 lbs.	5.25 @	5.40
less car lots, barrels	100 lbs.	5.75 @	6.00
imported, casks	lb.	.06½@	.06
lump, imported, barrels	lb.	.10½@	.11
white, domestic, granular, casks, car lots, contracts, works	100 lbs.	4.45 @	4.90
imported, casks	100 lbs.	4.45 @	4.90
Amyl acetate, normal (from fusel oil), works, tanks	lb.	.14½	Nom.
car lots, works, drums	lb.	.15½@	.16
less car lots, freight allowed	lb.	.16 @	.16½
(from pentane), delivered tanks	lb.	.135 @	—
car lots, del'vd, drums	lb.	.142 @	—
less car lots, delivered drums	lb.	.149 @	—
secondary car lots, drums	lb.	.127 @	—
less car lots, drums	lb.	.123 @	—
tanks	lb.	.113 @	—
Alcohol (see Alcohol).			
Butyrate, bottles	lb.	1.00 @	1.40
Chloride, normal, works, drums, lb.		.61 @	—
small lots, works	lb.	.68 @	—
Chlorides, mixed, car lots, works, drums	lb.	.127 @	—
less car lots, works, drums, lb.		.133 @	—
tanks, works	lb.	.125 @	—
Nitrite, bottles	lb.	1.80 @	1.85
Salicylate, cans	lb.	.70 @	1.50
Amylene, less car lots, works, drums	lb.	.21 @	—
Anethol, bottles	lb.	.85 @	1.00
Angelica root, bales	lb.	.10 @	.12
Angostura bark, bales	lb.	.19 @	.20
Anilin oil, drums	lb.	.15 @	.16
tanks	lb.	.13½@	.14¼
Oil for red, drums	lb.	.38 @	.40
Anise, Spanish, bags	lb.	.07½@	.08
star, bags	lb.	.09½@	.10
Anisic aldehyde, bottles	lb.	2.00 @	3.00
Annatto paste, boxes	lb.	.34 @	.37
Seed, bags	lb.	.06 @	.07
Anthraquinone, 99.5 p.c., sublimed, barrels	lb.	.45 @	.50
Antimony chloride solution (butter of antimony), domestic, carboys	lb.	.13 @	.17
imported, carboys	lb.	.14½@	—
Metal, bulk	lb.	.0595@	—
Needle, powdered, barrels	lb.	.07 @	.09
Oxide, barrels	lb.	.07½@	.10
Salt, 65% to 66% tins	lb.	.20 @	.23
Sulphuret, golden, barrels	lb.	.16 @	.20
Vermilion, barrels	lb.	.38 @	.43
White pigment, f.o.b. Texas freight allowed, pale ivory, barrels	lb.	.06½@	.06¾
pure white, barrels	lb.	.11¾@	.12¼
standard white, barrels	lb.	.08¾@	.09¼
Antipyrine, bulk, cans	lb.	2.00 @	2.05
Apomorphine, cans	oz.	22.45 @	22.70
Archil, extract, concentrated, barrels	lb.	.20 @	.25
double, barrels	lb.	.16 @	.17
triple, barrels	lb.	.16 @	.17
Areca nuts, powdered, bbls	lb.	.10 @	.11
Arecoline hydrobromide, bottles, vials	oz.	4.25 @	4.50
Argols, crude, 30 p.c., casks	lb.	.05¾@	.06½
80 to 85 p.c., casks	lb.	.11 @	.11½
Arnica flowers, bales	lb.	.07½@	.08
Root, bales	lb.	.40 @	.41
Arrowroot, St. Vincent, powdered, bags	lb.	.08 @	.08½
barrels	lb.	.08 @	.09
Arsenic, metal lump, cases	lb.	.25¾@	.28
Iodide (arsenous), bottles, jars, lb.		5.20 @	5.25
Trioxide (see Acid arsenous)			
White, powdered, kegs	lb.	.04 @	.05
Arsenous chloride, liquid, bottles, lb.		1.85 @	—
Asafetida, cases	lb.	.14 @	.16
powdered, barrels, boxes	lb.	.28 @	.35
Asbestine (see Talc, fibrous).			
Asphaltum, Barbadoes (Manjak), A, barrels	lb.	.03 @	.06
AA, barrels	lb.	.10 @	.12
California, barrels	ton.	32.50 @	41.00
Cuban, bags	ton.	60.00 @	150.00
car lots, bags	ton.	30.00 @	60.00
Egyptian, bags	lb.	.13 @	.15
Gilsonite, select, bags, car lots, works	ton.	30.50 @	32.90
ex-warehouse, bags	ton.	51.00 @	58.00
Maltha, barrels	ton.	48.00 @	50.00
Mexican, barrels, drums	ton.	21.00 @	22.00
Texas, barrels, drums	ton.	15.00 @	25.00
Trinidad, commercial, barrels, ton.		28.00 @	35.00
varnish grade, barrels	ton.	100.00 @	120.00
Atropine alkaloid, vials	oz.	5.00 @	5.25
Sulphate, vials	oz.	1.75 @	1.80

B

Balm of Gilead buds, bags	lb.	.22 @	.24
Barberry bark, bags	lb.	.10 @	.11
Root bark, bales	lb.	.15 @	.16
Barbital, cases	lb.	3.40 @	3.80
Barium carbonate, natural (witherite), 90 p.c., ground, car lots, works, bags	ton.	40.00 @	—
99 p.c., through 200 mesh, car lots, works, bags,	ton.	38.60 @	—
precipitated, bags	ton.	56.50 @	58.50
Chlorate, kegs	lb.	.14 @	.15
Chloride, C.P. crystals, barrels, lb.		.13 @	.14
technical, crystals, domestic, car lots, barrels, bags	ton.	63.00 @	65.00
less car lots, barrels, bags,	ton.	67.00 @	69.00
Dioxide (peroxide), drums	lb.	.11 @	.13
Fluoride, barrels	lb.	.12 @	.13
Fluosilicate, barrels	lb.	.15 @	—
Hydroxide (hydrate), barrels,	lb.	.04¼@	.05¼
Iodide, bottles	lb.	4.45 @	4.50
Nitrate, casks	lb.	.07½@	.07½
Oxide (monoxide), drums	lb.	.10 @	.13
Sulphate, technical (see Barytes and Blanc fixe).			
x-ray, barrels	lb.	.10 @	.11
Barytes, domestic, floated, car lots, barrels	ton.	30.50 @	—
f.o.b. St. Louis, barrels,	ton.	23.00 @	—
paper bags	ton.	22.20 @	—
cloth bags	ton.	23.00 @	—
less car lots, barrels	ton.	34.00 @	35.00
Southern, off color, works, bulk	ton.	12.00 @	16.00
spot, ex-warehouse, bulk	ton.	19.00 @	—
imported, ground, c/l, ex-dock, to arrive, barrels	ton.	23.00 @	27.00
ex-warehouse, barrels	ton.	28.00 @	33.00
unground, ex-dock, bulk	ton.	11.50 @	—

Bauxite, mines, bulk	ton.	5.00	@ 8.00
Bay leaves (see Laurel leaves).			
Bay rum, imported, barrels	gal.	.65	@ .70
Bayberry bark, bags	lb.	.07	@ .08
Belladonna leaves, bales	lb.	.10	@ .15
Root, bales	lb.	.10	@ .12
Benzaldehyde, technical, drums, lb.		.60	@ .62
U.S.P., IX, drums	lb.	1.10	@ 1.20
U.S.P., X, drums	lb.	1.20	@ 1.30
Benzene (benzol), 90 p.c., works, drums	gal.	.27	@ —
freight allowed, tanks	gal.	.22	@ —
nitration, works, drums	gal.	.28	@ —
freight allowed, tanks	gal.	.23	@ —
pure, works, drums	gal.	.27	@ —
freight allowed, tanks	gal.	.22	@ —
Benzidin base, barrels	lb.	.67	@ .69
Benzol (see Benzene).			
Benzoyl chloride, drums	lb.	.40	@ .45
Peroxide, works, cans	lb.	1.65	@ 1.90
Benzyl acetate, f.f.c., bottles.	lb.	.52	@ 1.00
Alcohol (see Alcohol, benzyl).			
Benzoate, a.m.a., f.f.c., tins.	lb.	.90	@ 1.20
Chloride, 95@97 p.c., refined, drums	lb.	.40	@ .41
technical, drums	lb.	.30	@ .31
Formate, cans	lb.	2.75	@ 3.50
Benzylidin acetone, bottles	lb.	2.15	@ 3.50
Berberis root, bales	lb.	.08	@ .09
Betanaphthol, sublimed, barrels, lb.		.60	@ —
technical, car lots, barrels	lb.	.22	@ —
less car lots, barrels	lb.	.24	@ —
Benzoate, boxes, kegs	lb.	2.35	@ 2.50
Betanaphthylamine, technical, kegs	lb.	.53	@ .55
Beth root, bales	lb.	.07	@ .08
Bismuth citrate, U.S.P., VIII, boxes	lb.	2.45	@ 2.50
Hydroxide, boxes	lb.	2.65	@ 2.70
Metal, ton lots	lb.	.85	@ —
Nitrate, crystals, jars	lb.	.95	@ —
Oxychloride, boxes	lb.	2.60	@ —
Subbenzoate, boxes	lb.	2.90	@ 2.95
Subcarbonate, U.S.P., barrels, fiber drums	lb.	1.25	@ —
X-ray, bottles, fiber drums	lb.	2.20	@ —
Subgallate barrels	lb.	1.35	@ —
Subiodide, bottles	lb.	3.70	@ 3.75
Subnitrate, powder, bottles, fiber drums	lb.	.95	@ 1.00
Subsalicylate, 62@66 p.c., barrels	lb.	2.15	@ —
Trioxide, powder, boxes	lb.	3.05	@ 3.10
Bismuth-ammonia, citrate, U.S.P., scales, cans	lb.	5.20	@ 5.25
U.S.P., powder, cans	lb.	3.10	@ 3.15
Black:—			
Bone, powdered, barrels	lb.	.05¼	@ .15
Carbon gas, litho ink qualities, bags	lb.	.22	@ .30
standard, rubber, ink and paint qualities, bags	lb.	.05	@ —
cartons	lb.	.05¾	@ —
cases	lb.	.06½	@ —
works, Texas, bags	lb.	.0272	@.0275
Louisiana, bags	lb.	.0282	@.0295
export, fully compressed, f.a.s. gulf ports, 312½-lb. cases	lb.	.03¾	@ .04¼
varnish grade, highest, bags, lb.		.35	@ .55
medium, bags	lb.	.16	@ .26
Coach, in japan, cans	lb.	.42	@ .44
Drop, barrels	lb.	.05½	@ .17
in oil, cans	gal.	2.32	@ —
Iron oxide, com., barrels	lb.	.04½	@ .07
C.P., barrels	lb.	.10	@ .15
Ivory, genuine, barrels	lb.	.30	@ .35
Lamp, commercial, barrels	lb.	.06	@ .08
grinders, blue-tone, barrels, lb.		.10	@ .18
litho, barrels	lb.	.18	@ .22
special high-grade, bbls.	lb.	.26	@ .42
velvet, barrels	lb.	.08	@ .12
in oil, cans	gal.	2.32	@ —
in oil, cans	gal.	2.32	@ 4.10
(Black dyes are listed under Dye.)			
Black haw bark, bales	lb.	.08	@ .10
Root bark, bales	lb.	.11	@ .12
Black Indian hemp root, bales.	lb.	.09	@ .10
Blanc fixe, dry, precip., high-grade, works	ton.	70.00	@75.00
ordinary, car lots, works,	ton.	60.00	@65.00
by-product, car lots, works,	ton.	50.00	@55.00
pulp, works, bulk	ton.	42.50	@45.00
Bleaching powder, car lots, works, drums	100 lbs.	1.75	@ 2.00
less car lots, works, drums,	100 lbs.	1.90	@ 2.35
Blood, dried, domestic, New York, 16@17 p.c. ammonia, bulk,	unit.	1.80	@ —
high-grade ground, 16@17 p.c. ammonia, f.o.b. Chicago, bulk	unit.	1.80	@ —
soluble, see Albumen.			
imported, April shipment, bags	unit.	1.85	@ —
Bloodroot, bales	lb.	.10	@ .12
Blue:—			
Bronze, barrels	lb.	.35	@ .36
Celestial, barrels	lb.	.10	@ .15
Chinese, barrels	lb.	.35	@ .37
in oil, cans	gal.	7.62	@ —
Cobalt, imitation, in oil, cans, half-pints.		.37	@ —
Milori, barrels	lb.	.35	@ .37
Prussian, barrels	lb.	.35	@ .37
in oil, cans	half-pints.	.28	@ .38
Soluble, barrels	lb.	.35	@ .37
Ultramarine, dry, cobalt grades, barrels	lb.	.18	@ .25
grinding grades, barrels	lb.	.10	@ .30
jobbing grades, barrels	lb.	.07	@ .10
lithographic grades, barrels	lb.	.15	@ .30
in oil, cans	half-pints.	.32	@ .52
(Blue dyes are listed under Dye).			
Blueflag root, bales	lb.	.12	@ .14
Blue mass, U.S.P., cans, kegs	lb.	.79	@ .81
Blue stone (see Blue vitriol).			
Blue vitriol, 99 p.c., crystals, car lots, barrels	100 lbs.	3.00	@ —
less car lots, barrels	100 lbs.	3.15	@ 3.70
Bone, raw, 4% p.c. ammonia, 50 p.c. phosphate, f.o.b. Chicago	ton.	20.00	@21.00
Indian	ton.	22.00	@23.00
South American, to arrive	ton.	20.00	@20.50
steamed, domestic, 1¼ p.c. ammonia, 60 p.c. phosphate, f.o.b. Chicago	ton.	16.00	@18.00
4½ p.c. ammonia, 50 p.c. phosphate	ton.	21.50	@ —
imported, 1¼ p.c. ammonia, 60-70 p.c. phosphate, c.i.f. ports	ton.	18.00	@ —
Meal steamed, domestic, 3 p.c. ammonia, 50 p.c. phosphate, f.o.b. Chicago, bags	ton.	18.00	@19.00
imported, bags	ton.	18.50	@ —
Boneset leaves, bags	lb.	.09	@ .10
Borage flowers, bales	lb.	.18	@ .30
Borax, technical, 99¼ p.c. granular, contracts, minimum 80 tons, delivered, sacks	ton.	36.00	@ —
barrels	ton.	46.00	@ —
car lots, delivered, sacks,	ton.	40.00	@ —
barrels	ton.	50.00	@ —
less car lots, ex warehouse, sacks	ton.	45.00	@50.00
barrels	ton.	55.00	@60.00
Borax, technical, powdered, contracts, minimum 80 tons, delivered, sacks	tons.	41.00	@ —
barrels	ton.	51.00	@ —
carlots, delivered, sacks..	ton.	45.00	@ —
barrels	ton.	55.00	@ —
less carlots, ex warehouse, sacks	ton.	50.00	@55.00
barrels	ton.	60.00	@65.00
crystals, $6 per ton higher.			
U.S.P., $15 per ton higher.			
Bordeaux mixt., paste, bbls.	lb.	.11½	@ .14
powder, barrels	lb.	.11½	@ .14
Borneol, bottles	lb.	1.35	@ 2.00
Brazilwood, sticks, shipment	ton.	26.00	@28.00
Extract (see Hypernic).			
Brimstone (see Sulphur).			
Bromides (see name of base).			
Bromine, purified, works, car lots, cases	lb.	.36	@ —
1,000-lb. lots, cases	lb.	.38	@ —
smaller lots, cases	lb.	.43	@ —
Bromoform, U.S.P., jars	lb.	1.75	@ 1.90
Bronze powder, aluminum, pure, bulk	lb.	.50	@ .75
linings, bulk	lb.	.75	@ 1.50
Gold, bulk, litho. grades	lb.	.40	@ .55
moulding	lb.	.50	@ .75
printing ink	lb.	.65	@ 1.05
radiators	lb.	.40	@ .50
sprayers	lb.	.50	@ .80
Broomtop, bales	lb.	.07½	@ .08
Brown:—			
Metallic, Pennsylvania, works, bags, barrels	ton.	37.00	@45.00
Sienna, American, burnt, powdered, ton lots, barrels	lb.	.03	@ .04
raw, powdered, ton lots, barrels	lb.	.02¾	@ .03½
Italian, burnt, powdered, ton lots, barrels	lb.	.04½	@ .11
Italian, raw, powdered, ton lots, barrels	lb.	.04½	@ .11
Spanish, high grades, bulk	lb.	.03	@ —
low grades, bulk	lb.	.02¾	@ —
Umber, American, burnt, powdered, car lots, barrels	lb.	.02¾	@ .03½
Turkey, burnt, powdered, ton lots, barrels	lb.	.04	@ .06
raw, powdered, ton lots, barrels	lb.	.04	@ .06
in oil, best grades, cans	gal.	3.62	@ —
Vandyke, domestic, ton lots, barrels	lb.	.03	@ .03¼
imported, barrels	lb.	.04¼	@ .05
in oil, cans	gal.	3.14	@ —
Brucine, alkaloid, cans	oz.	.10	@ .11
sulphate, cans	oz.	.05	@ .06
Byronia root, bales	lb.	.10	@ .11
Buchu leaves, bales	lb.	.19	@ .20
Buckthorn bark, true, bales	lb.	.05	@ .06
Berries, bags	lb.	.23	@ .24
Burdock, root, bales	lb.	.06½	@ .07
Burgundy pitch, dom., stands	lb.	.05¼	@ .07
imported, stands	lb.	.10	Nom.
Butanes, commercial, 16-32 deg., group 3, tankcars	gal.	.04	@ —
Butternut bark, bales	lb.	.06½	@ .07
Butyl acetate, normal, car lots, drums	lb.	.134	@ —
less car lots, drums	lb.	.139	@ —
tankcars	lb.	.124	@ —
secondary, car lots, drums	lb.	.109	@ —
less car lots, drums	lb.	.114	@ —
tanks	lb.	.099	@ —
Alcohol (see Alcohol, butyl).			
Aldehyde, works, drums	lb.	.35	@ .38
Lactate, drums	lb.	.29	@ —
Propionate, works, tanks	lb.	.20	@ .22
works, drums	lb.	.21½	@ .23
Stearate, works, drums	lb.	.25	@ .30
Tartrate, drums	lb.	.55	@ .60
Butyric ether, drums	lb.	.80	@ —

C

Cadmium, bromide, jars, bottles.	lb.	1.25	@ 1.30
Iodide, bottles, jars	lb.	3.60	@ 3.65
Lithophone (see Yellow)			
Metal, cases	lb.	.55	@ .60
Red (see R)			
Sulphide (see Yellow)			
Caffeine alkaloid, contract 1,000 lbs. or more bulk	lb.	1.85	@ —
less than 1,000 lbs., cans, cases	lb.	1.90	@ 1.95
Citrated, cans	lb.	1.55	@ 1.60
Hydrobromide, jars, bottles	lb.	4.82	@ 4.87
Calabar beans, bags	lb.	.15	@ .16
Calamus root, bleached, cases	lb.	.25	@ .27
Calcium acetate, delivered, bags, 100 lbs.	100 lbs.	2.50	@ —
Arsenate, car lots, drums	lb.	.06½	@ .06½
Bromide, jars	lb.	.60	@ .62
Carbide, drums	lb.	.06	@ .06
Carbonate (see Chalk, precipitated and Whiting).			
Chloride, flake, domestic, 77 to 80 p.c., bags	100 lbs.	1.82	@ 1.97
drums	100 lbs.	1.82	@ 1.97
car lots, works, drums,	ton.	21.00	@ —
imported, 75 p.c., drums	ton.	21.00	@ —
solid, domestic, 73 to 75 p.c., drums	100 lbs.	1.69	@ 1.84
car lots, works, drums	ton.	18.00	@ —
imported, shipment, casks	ton.	18.00	@19.00
Gluconate, pharmaceutical grade, powdered, granular, 125 lb. barrels	lb.	.47	@ —
25-pound lots	lb.	.54	@ —
technical, 125-lb. barrels	lb.	.25	@ —
Glycerophosphate, 100-lb. lots, barrels, kegs	lb.	1.15	@ —
Hydrate, works, bags	ton.	11.50	@12.00
barrels	100 lbs.	.60	@ .85
Hypophosphite, cans	lb.	.55	@ .60
Iodide, bottles, jars	lb.	3.85	@ 3.90
Lactate, U.S.P., barrels	lb.	.25	@ .28
Nitrate, imported, 15 p.c. N, ex-vessel, ports, bags	ton.	24.50	@ —
Palmitate, barrels	lb.	.16	@ .19
Phosphate, barrels	lb.	.07½	@ .08¾
dibasic, precipitated, 38-42%, c.i.f. Atlantic ports, bags, unit.		.60	@ —
Resinate, precip., barrels	lb.	.13	@ .14
Stearate, precip., barrels	lb.	.14½	@ .16
car lots	lb.	.14	@ —
Sulphate (see plaster of paris).			
Sulphide, crude, drums	lb.	.21½	@ .24
luminous, tins	lb.	.75	@ .80
Calendula flowers, bales	lb.	.40	@ .45
Calomel, boxes, kegs	lb.	1.15	@ —
Camphor, slabs, cases	lb.	.38	@ .39
tablets, tins	lb.	.44	@ .45
powdered, cases	lb.	.39	@ .40
Monobromate, boxes, kegs	lb.	1.60	@ 1.65
Camwood bark, ground, bbls.	lb.	.16	@ —
Canada balsam (see Fir balsam).			
Canary seed, Argentine, bags	lb.	.03¼	@ .03¾
Morocco, bags	lb.	.03½	@ .04
Turkish, bags	lb.	.03½	@ .04
Candles:—			
Paraffin, 6s, 14 oz., case of 40 sets	set.	.09	@ .09½
6s, 14 oz., case of six cartons containing 36 sets	set.	.10	@ .10½
6s, 12 oz., 40-set cases	set.	.08¼	@ .08½
6s, 12 oz., case of six cartons containing 36 sets	set.	.09	@ .09½
Stearin, 6s, 16 oz., plain cases.	set.	.12	@ .20
Canella alba bark, bales	lb.	.24½	@ .25
Cannabis, herb, bales	lb.	.14	@ .16
Cantharides, Russian, cases	lb.	1.90	Nom.
powdered, boxes	lb.	2.20	Nom.
Chinese, whole, cases	lb.	.85	@ .90
powdered, boxes	lb.	1.15	@ 1.20
Caraway seed, Dutch, bags	lb.	.07	@ .07½
Carbazole, refined, barrels	lb.	.75	@ —
Carbinol:—			
Butyl, normal, works, drums	lb.	.66	@ —
small lots, works	lb.	.75	@ —
secondary, works, drums	lb.	.66	@ —
small lots, works	lb.	.75	@ —
Diethyl, works, drums	lb.	.66	@ —
small lots, works	lb.	.75	@ —
Isobutyl, works, drums	lb.	.66	@ —
small lots, works	lb.	.75	@ —
small lots, works	gal.	5.00	@ —
Methylpropyl, works, drums	lb.	.66	@ —
small lots, works	lb.	.75	@ —
Carbon bisulphide, drums	lb.	.05½	@ .12
Dioxide, cylinders	lb.	.06	@ .08
Tetrachloride, C.P., car lots, drums	lb.	.07¾	@ —
less car lots, drums	lb.	.08½	@ —
commercial, car lots, drums,	lb.	.05½	@ —
less car lots, drums	lb.	.06	@ —
Cardamom seed, bleached, cases, lb.		.75	@ 1.05
decorticated, cases	lb.	.50½	@ .51
green, bags	lb.	.40	@ .40½
Carvol, bottles	lb.	3.00	@ 3.25
Cascara sagrada bark, one year, bales	lb.	.10	@ .11
two years, bales	lb.	.11	@ .12
new crop, bales	lb.	.09	@ .10
Case-hardening mixture, 45 p.c., less car lots, drums	lb.	.10¾	@ —
granular, drums	lb.	.11¾	@ —
30 p.c., lump, drums	lb.	.09	@ —
Casein, domestic, 20-30 mesh, car lots, bags	lb.	.07½	@ .08
80-100 mesh, car lots, bags	lb.	.08	@ .09
Argentine, 20-30 mesh, car lots, bags	lb.	.09	@ .09½
80-100 mesh, car lots, bags	lb.	.09½	@ .10
Cassia, Batavia, No. 1, bales	lb.	.07½	@ .08
No. 3, bales	lb.	.05¾	@ .06
shortstick, bales	lb.	.06½	@ .06¾
China, rolls, selected, cases	lb.	.05¼	@ .05½
broken, extra, bags	lb.	.03½	@ .03¾
Saigon, cases	lb.	.16½	@ .16¾
Cassia buds, cases	lb.	.12	@ .12½
Cassia fistula, baskets	lb.	.09½	@ .10
Castile soap, white	.40-lb. case.	15.50	@ —
powdered, barrels	lb.	.20	@ .22
Castoreum, cans	lb.	10.00	@18.00
Castor oil (See oils).			
Castor pomace, 5½ p.c. ammonia, car lots, f.o.b. works, bags	ton.	14.00	@ —
imported, c.i.f. southern ports, April-May shipment, bags,	ton.	16.00	@ —
Catnep, leaves, bales	lb.	.14	@ .15
Celery seed, bags	lb.	.34	@ .34½
Celluloid, scrap, amber	lb.	.15	@ .16
black, mixed	lb.	.04½	@ .05½
colored, single	lb.	.05	@ —
transparent	lb.	.16	@ .17
Ivory, grained	lb.	.13	@ .14
ungrained	lb.	.13	@ .14
shavings, amber	lb.	.10½	@ .12½
colored, mixed	lb.	.05	@ .08
ivory	lb.	.11	@ .12
white	lb.	.11	@ .12
Cellulose, acetate, barrels, bags, ton lots	lb.	.80	@ .90
less ton lots	lb.	1.00	@ —
scrap, transparent, bags	lb.	No stocks	
Cerium hydrate, works	lb.	.65	@ —
Oxalate, works, 500-lb. barrels,	lb.	.25	@ —
works, 100-lb. kegs	lb.	.28	@ —
Chalk, precipitated, car lots, extra light, casks	lb.	.03	@ .04
heavy, casks	lb.	.02	@ .02¾
light, casks	lb.	.02¾	@ .05
Chamomile flowers, Hungarian, genuine, cases	lb.	.14	@ .16
Roman, bales	lb.	.33	@ .35
Charcoal, common, barrels	lb.	.05½	@ —
willow, powdered, barrels	lb.	.06	@ .07
Chestnut extract, clarified, 25 p.c. tannin, barrels	lb.	.01¾	@ .01¾
tanks	lb.	.01¼	@ .01⅝
powdered, f.o.b. works, bags, lb.		.04⅞	@ —
China clay, domestic, lump, mines, bulk	ton.	8.00	@ 9.00
powdered, spot, bags	ton.	10.00	@15.00
imported, lump, bulk	ton.	15.00	@25.00
powdered, barrels	lb.	.01¾	@ .03
Chloral hydrate, drums	lb.	.75	@ .80
Chlorine, liquid, car lots, delivered, cylinders	lb.	.05½	@ —
contracts, cylinders	lb.	.05½	@ —
less car lots, cylinders	lb.	.07½	@ —
tanks, works, freight equalized	100 lbs.	1.75	@ —
Pacific Coast, delivered	100 lbs.	2.35	@ —
Chloroacetophenone, f.o.b. works, tins	lb.	2.00	@ —
Chloroform, technical, drums	lb.	.15	@ .16
U.S.P., drums	lb.	.25	@ .26
Chlorophyl, oil-soluble, tins, bottles	lb.	1.15	@ 1.40
alcohol-soluble, tins	lb.	3.82	@ —
Chloropicrin, commercial, cylinders, works	lb.	1.00	@ 1.35
Chrome acetate, 7½@8 p.c. chrome, barrels	lb.	.05	@ —
Cake, works, bulk	ton.	12.50	@13.50
Colors (see Green, etc., also Dye)			
Oxide (see Green, Chrome Oxide)			
Sulphate, pearl, boxes, cans, fiber drums	lb.	.40	@ .45
powder, boxes, cans, fiber drums	lb.	.45	@ .50
scales, boxes, cans, fiber drums	lb.	.45	@ .50
Trioxide (see Acid, Chromic)			
Chrysarobin, cans	lb.	2.50	@ 2.55
Cinchona bark, quills, short, bags	lb.	.45	@ .50
long, cases	lb.	.48	@ .55
broken, bags	lb.	.14½	@ .15
chips, bags	lb.	.14½	@ .15
Cinchonidine alkaloid, powdered, crystals, cans	oz.	.48	@ .54
Sulphate, cans	oz.	.28	@ —
Cinchonine alkaloid, powdered, crystals, cans	oz.	.27	@ .34
Sulphate, cans	oz.	.20	@ —
Cinchophen, U.S.P., barrels	lb.	2.75	@ —
boxes, drums, kegs	lb.	2.85	@ 3.00
Cinnamic alcohol (see Alcohol, cinnamic).			
Aldehyde, f.f.c., bottles	lb.	2.25	@ 2.50
Cinnamon, Ceylon, No. 1, bales,	lb.	.11	@ .12
No. 2, bales	lb.	.08½	@ .09
Citral, 100 p.c., cans	lb.	1.65	@ 4.25
Citrine ointment, jars, tubes	lb.	.57	@ —
Citronellal, bottles	lb.	2.25	@ 2.50
Citronellol, bottles	lb.	2.00	@ 3.00
Cleaners' naphtha (see Petroleum solvents).			
Clove, Madagascar, bales	lb.	.08¾	@ .09
Zanzibar, bales	lb.	.08¾	@ .09
Clover tops, bales	lb.	.12	@ .13
Coaltar, barrels	bbl.	8.00	@ 8.50
Cobalt acetate, barrels	lb.	.75	@ .80
Carbonate, technical, barrels, lb.		1.34	@ 1.40
Hydrate, barrels	lb.	1.66	@ 1.76
Linoleate, paste, barrels	lb.	.39	@ .40
solid, 8½ p.c., barrels	lb.	.42	Nom.
Oleate, barrels	lb.	.26	@ —
Oxide, black, kegs	lb.	1.15	@ 1.25
Resinate, fused, A, barrels	lb.	.12½	@ —
1 p.c., barrels	lb.	.11¾	@ —
2 p.c., barrels	lb.	.16	@ .16½
3 p.c., barrels	lb.	.17	@ .17½
precipitated, barrels	lb.	.41	@ .42
Cocaine hydrochloride, cans	oz.	8.50	@ 8.75
Cochineal, gray, bags	lb.	.36	@ .42
Teneriffe silver, bags	lb.	.37	@ .42
Cocillana bark, bags	lb.	.19	@ .20
Cocoa butter, bulk, bags	lb.	.09¾	@ .09¾
Codeine, 100-oz. lots, alkaloid, cans	oz.	10.20	@10.25
Hydrochloride, cans	oz.	9.20	@ 9.25
Phosphate, cans	oz.	7.75	@ 7.80
Sulphate, cans	oz.	8.25	@ 8.30
Codliver oil (See oils)			
Conosh root, black, bales	lb.	.05½	@ .06
blue, bales	lb.	.05½	@ .06
Colchicine alkaloid, vials	oz.	24.00	@25.00
Colchicum seed, bags	lb.	.55	@ .60
Collodion, U.S.P., drums	lb.	.13	@ .14
flexible, U.S.P., drums	lb.	.15	@ .16
Colocynth, pulp, sales	lb.	.12	@ .13
Colombo root, bales	lb.	.06	@ .06½
Coltsfoot leaves, bales	lb.	.07	@ .08
Condurango bark, bags	lb.	.08½	@ .09
Conium leaves, bales	lb.	.10	@ .11
Copaiba balsam, Para, cans	lb.	.13	@ .14
S.A., U.S.P., cans	lb.	.15	@ .16
Copper, electrolytic	lb.	.05	@ —
Carbonate, barrels	lb.	.07	@ .15½
Chloride, barrels	lb.	.17	@ .18
Cyanide, technical, barrels	lb.	.39	@ .44
Iodide, bottles	lb.	5.07	@ 5.12
Oleate, precipitated, barrels	lb.	.20	@ —
Oxide, black, kegs	lb.	.14½	@ .17
red, kegs	lb.	.14¾	@ .15¾
Resinate, precip., barrels	lb.	.18	@ .19
Stearate, precip., barrels	lb.	.35	@ .40
Sulphate (see Blue Vitriol).			
Copperas, crystals and granular, car lots, works, bags	ton.	14.00	@15.00
barrels	ton.	16.00	@17.00
bulk	ton.	12.00	@13.00
Copra, coast, bags	lb.	.0145	@.0150
Coriander seed, Morocco, bags, lb.		.05½	@ .06
bleached, bags	lb.	.07½	@ .08
Russian, bags	lb.	.02½	@ .02¾
Corn syrup, 42 deg., bbls.	100 lbs.	2.46	@ —
43 deg., barrels	100 lbs.	2.51	@ —
Cornsilk, bales	lb.	.05	@ .06
Corrosive sublimate, boxes, fiber drums, kegs	lb.	.67	@ .72
Cottonroot bark, bales	lb.	.06	@ .07
Cottonseed, hull ash, 25-30 p.c. potash, deliv'd, bulk	unit-ton.	1.35	@ —
Coumarin, cans	lb.	3.10	@ 3.35
Cramp bark, genuine, bales	lb.	.25	@ .26
so-called, bales	lb.	.06	@ .08
Cranesbill root, bales	lb.	.08	@ .10
Cream tartar, barrels	lb.	.14½	@ .14¾
kegs	lb.	.15	@ .15¼
Creosote, U.S.P., bottles	lb.	.45	@ .47
Carbonate, bottles, carboys	lb.	1.45	@ 1.75
Oil, grade 1, works, tanks.	gal.	.11	@ .12
II (coaltar solution), works, tanks	gal.	.10	@ .12
III, works, tanks	gal.	.09	@ .12
Cresol, U.S.P., drums	lb.	.10½	@ .11
Crotonaldehyde, technical, car lots, drums	lb.	.32	@ —
less car lots, drums	lb.	.36	@ —
Cubeb, berries, XX, bags	lb.	.25	@ .26
powdered, cases, bags	lb.	.30	@ .31
Cudbear, powdered, boxes	lb.	.19	@ .25
Culver's root, bales	lb.	.12	@ .13
Cumin seed, Morocco, bags	lb.	.09	@ .09½
Cutch, Philippine, car lot, bales, lb.		.02½	@ —
less car lot, bales	lb.	.03½	@ —
Extract, Borneo or Philippine, solid, 55 p.c., bags	lb.	.03¾	@ .05
Cyanamide, 21-22 p.c., nitrogen, bags, delivered	unit-ton.	.97½	@ —
Cyanide-chloride mixture, 75 p.c. less car lots, drums	lb.	.14	@ .15
granular, drums	lb.	.16	@ .17

D

Damiana leaves, bales	lb.	.15	@ .16
Dandelion root, German, bales	lb.	.10	@ .10½
Deertongue leaves, bales	lb.	.06½	@ .07
Degras, common, domestic, works, car lots, barrels	lb.	.02¼	@ —
less car lots, barrels	lb.	.02¾	@ .03
English, barrels	lb.	.03¾	@ .03¾
German, barrels	lb.	.02¾	@ .03¼
neutral, domestic, barrels	lb.	.07¼	@ .08¼
English, barrels	lb.	.07¼	@ .08
German, barrels	lb.	.06¼	@ .07
Derris root, bales	lb.	.19	@ .20
Dextrin, British gum, bags, 100 lbs.	100 lbs.	3.39	@ 3.59
corn, canary, bags	100 lbs.	3.14	@ 3.34
white, bags	100 lbs.	3.09	@ 3.29
potato, imported, bags	lb.	.07¾	@ .08¾
tapioca, bags	lb.	.06¾	@ .07¾
Diacetone (see Alcohol, Diacetone)	lb.	.60	@ —
Diamyl ether, works, drums	lb.	.77	@ —
small lots	lb.	.20½	@ —
Phthalate, drums	lb.	2.35	@ 2.45
Dianisidin, barrels	lb.	2.35	@ 2.45
Diatomaceous, earth, domestic, car lots, bags	ton.	0.00	@80.00
less car lots, bags	ton.	75.00	@95.00
Dibutyl phthalate, drums	lb.	.20½	@ —
Dicalcium phosphate (see calcium phosphate, dibasic).			
Diethyl carbonate, commercial, drums	lb.	.31¾	@ —
refined, 99 p.c.	lb.	.50	@ —
Phthalate, drums	lb.	.20	@ —
Diethylanilin, drums	lb.	.52	@ .54
Diethyleneglycol, car lots, works, drums	lb.	.14	@ .16
less car lots, drums	lb.	.15	@ .16
Monoethyl ether, car lots, works, drums	lb.	.15	@ —
less car lots, works, drums	lb.	.16	@ .18
Monobutyl ether, works, drums, lb.		.27	@ .30
Diethylene oxide, car lot, works, drums	lb.	.26	@ —
less car lots, drums	lb.	.27	@ —
tankcars	lb.	.25	@ —
Digitalis leaves, bales	lb.	.18	@ .19
Diglycol oleate, barrels	lb.	.16	@ —
Dill seed, bags	lb.	.07½	@ .08
Dimethyl phthalate, drums	lb.	.24½	@ —
Dimethylanilin, drums	lb.	.26	@ .28
Dinitrobenzene, barrels	lb.	.15½	@ .16½
purified, barrels	lb.	.17½	@ .18½
Dinitrochlorobenzene, barrels	lb.	.13½	@ .15
Dinitronaphthalene, kegs	lb.	.35	@ .38
Dinitrophenol, barrels	lb.	.23	@ .24
Dinitrotoluene, drums	lb.	.15	@ .16
Diorthotoluolguanidin, drums	lb.	.42	@ .43
Dip oil (see Tar acid oil).			
Diphenyl, car lots, works, bbls.	lb.	.15	@ —
less car lots, works, barrels	lb.	.20	@ .25
Diphenyl oxide, bottles	lb.	1.00	@ 1.25
Diaphenylamine, barrels	lb.	.31	@ .32
Diphenylguanidin, drums	lb.	.33	@ .34
Diphenylmethane, bottles	lb.	1.75	@ 2.00
Disodium phosphate (see Soda phosphate, dibasic).			
Divi-divi, shipments, bags	ton.	26.00	@27.00
Extract, 25 p.c. tannin, barrels	l

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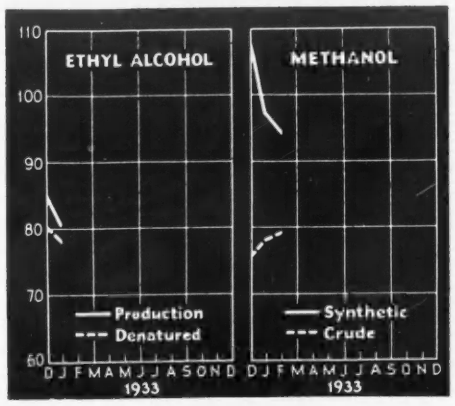
SOLVENT NEWS

APRIL ★ A Monthly Series of Articles for Chemists and Executives of the Solvent-Consuming Industries ★ 1933



(*moving twelve-month averages*, 1931 = 100)

CURRENT PRODUCTION

		1933	1932
ETHYL ALCOHOL			
Pure	Jan.-Feb.	—	23,564
1000 proof	Feb.	—	10,340
gallons	Jan.	6,014	13,224
Denatured	Jan.-Feb.	—	9,192
1000 wine	Feb.	—	3,966
gallons	Jan.	3,614	5,226
METHANOL			
Crude	Jan.-Feb.	569	434
1000	Feb.	257	225
gallons	Jan.	312	209
Synthetic	Jan.-Feb.	692	1,132
1000	Feb.	339	546
gallons	Jan.	353	586

ADVERSE FACTORS AFFECTED SOLVENTS IN FIRST QUARTER

In common with other industries, production and consumption of solvents were adversely affected by financial conditions which existed during a part of the first quarter of this year. Rayon producers have drawn more heavily upon solvents and other raw material supplies in this year to date than they did in the comparable period of 1932. In the last month, however, rayon production was curtailed about 30 per cent.

Seasonal influences worked in favor of a wider distribution of solvents in different industries in the latter part of the quarter, but the banking holidays in February and early in March slowed up industry in general and particularly interfered with productive schedules of the automotive trade, which was directly reflected in the lacquer industry.

Production of solvents has been based largely upon the status of consuming industries. In some cases supplies of coal-tar solvents are unusually low with no promise of larger outputs until coke-oven operations have been speeded up.

Latest available figures for industrial alcohol production refer to January and not only indicate a decline in output but also show that stocks at denaturing plants and in the hands of bonded dealers, were materially reduced in that month.

SOLVENT RECOVERY BY ADSORPTION GROWING IN POPULARITY

Recent competitive conditions have focused attention upon efficient solvent recovery systems in industry.

The usual processes employed may be classified as follows: direct condensation, condensation after compression, absorption in liquid media and adsorption in solid media.

The condensation processes are adapted only to types of manufacture in which it is possible to maintain a high solvent-air ratio. Where large volumes of air-vapor mixtures of low concentration are handled, they are not applicable and also entail the risk of explosion.

Thank You, Mr. Stevens!

U. S. Industrial Alcohol Co.,
New York City, N. Y.

Gentlemen:

Whoever "invented" SOLVENT NEWS please accept a complimentary handshake from us! Apart from terse and timely information, it offers a most attractive clearing house for the announcement of new products and processes, ordinarily absent in the columns of the regular trade journals.

Indeed, we can speak from experience. As you know, we recently submitted to SOLVENT NEWS, a brief outline of our Anti-Skinning Agent for use in the paint and varnish industry. Both the quantity and quality of inquiries received thru you from the trade have astounded us! We are proud to say that already we have formed contacts and established actual business relations with concerns who otherwise might never have heard of us, or our products.

Again, may I thank you for so generously co-operating with us.

Very truly yours,
HARDWOOD CHEMICAL CO., INC.
(*Signed*) A. Stevens, *President.*

The absorption processes have been used extensively in England and on the Continent, using either water, sulphuric acid, mineral oil or cresol as the absorbing agent.

Comparatively high vapor pressures from the absorbing media result in losses by this method however, when large volumes of air at low solvent concentration are handled.

In recent years the developments in solvent recovery have been more concerned with the use of solid adsorbents. Both activated carbon and silica gel have been used extensively. Where affinity for moisture is no disadvantage, the silica gel processes have proven very satisfactory. The activated carbon process is, however, most widely employed today. Recent developments have made this method practical even where the solvent-air mixtures are of large volume and low concentration.

* * *

Synthetic rubber, suitable for tire manufacture, is being produced in Russia from ethyl alcohol, according to a trade report.

ALCOHOL FORMULAS FOR SHELLAC CUTTING COMPARED

A prominent shellac solution manufacturer in the interest of the industry, has requested comments on the characteristics and employment of the various denatured alcohols used in this trade.

There are available for dissolving and thinning shellac, Completely Denatured Formulas 5, 5A and 10, Specially Denatured Formula 1, and proprietary alcohol solvent "SOLOX," the last mentioned closely resembling Formula S.D. 1.

Formulas 5 and 5A contain in addition to other denaturants, a small percentage of petroleum derivatives having a decided and not altogether pleasant odor. This odor is considered objectionable especially when the shellac is to be used in confined spaces. An impression exists that shellac finishes made with C.D. 5 and 5A do not dry as brilliant as with other formulas due possibly to the presence of the petroleum-derived denaturants.

C.D. 10 is free from these odorous petroleum constituents, is a good shellac solvent, and will be found entirely suitable for thinning.

S.D. Formula 1 Best Solvent

S.D. Formula 1 is doubtless the best of the group. Its composition is simple and it is free from denaturants other than a small percentage of approved methanol. However, because it is a permit formula, it can only be used in manufacture and may not be resold for thinning purposes.

SOLOX is a mixture of Special Formula 1 and small percentages of denaturants of good odor and solvent power. It can be purchased for manufacturing, and resold for thinning purposes without restriction. Combining as it does, excellent working properties and freedom from permit regulation, SOLOX offers a most acceptable medium for the marketer of shellac solutions.

U. S. I. ALCOHOL PRICES

The price list just released by U. S. Industrial Alcohol Co. for the second quarter of this year shows no changes in the prices of completely denatured, heavy tonnage formulas, tax paid or tax free alcohol.

There have been some revisions in the prices of certain specially denatured formulas, due to changes in the costs of denaturants used.

The important role industrial alcohol plays in everyday life is indicated by the educational window exhibit maintained by the U. S. Industrial Alcohol Co., on 42nd Street, New York. Every product shown in this display, even to the clothes on the models, carries a gold star denoting that alcohol is used in the process of manufacture. The female figure, embodying mechanical movements of the arms and head, directs further attention to this unusual exhibit.

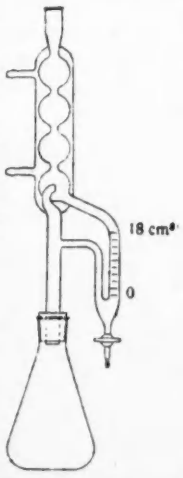
ADVERTISEMENTS — *Each article on this page is a paid advertisement.*

APRIL ★ SOLVENT NEWS ★ 1933

DETERMINATION OF THINNERS AND SOLVENTS IN PAINTS

A simple, self-contained device to replace the tedious and complicated method of distillation in a current of steam can be made in any laboratory.

It consists of a single 1000 cc. boiling flask and a reflex condenser, with a U-shaped tube melted into it. This tube should run from the bottom of the flattened lowest bulb of the condenser and re-enter the riser of the condenser. The lower end of this tube is widened, dropped slightly and provided with a drain-cock. The outer arm of the U-tube is graduated.



A measured amount of the material to be examined is placed in the flask, together with about 400 cc. of water and about 25 g. of dry sand, to prevent "balling." After attaching the condenser the drain-cock is closed and water is added until the graduated section and the return tube are filled.

When the contents of the flask are brought to a boil, the steam carrying the volatiles, with oil, is condensed in the condenser and the volatiles separate over the water in the graduated arm of the U-tube.

Upon completion of distillation, the water is drawn off through the stop-cock until it stands at the bottom of the graduated section. The volume of distillate is then read. The remaining water may then be drawn off and the distillate recovered for further examination if desired.

* * *

The consumption of acetates and alcohols has increased in the Canadian paint trade during 1930 and 1931, according to the latest report released by the Dominion Bureau of Statistics.

Both butyl and ethyl acetates show marked gains, as do ethyl alcohol and methanol. Other types of solvents registered declines.

SOLVENT PRICE TREND

With the exception of benzol, price fluctuations for solvents last month were on a declining scale. Reduced prices were announced for ethyl acetate, petroleum solvents and diluents, and solvent naphtha. Denatured alcohol not only held a steady position, but current prices were extended to cover deliveries through the second quarter of this year.

The index number at the beginning of the present month stood at 94.34 which compares with 95.24 for the preceding month.

TECHNICAL DEVELOPMENTS

Destruction of insects in candy and other food raw materials is being accomplished by exposing them to a gas mixture containing one part of ethylene oxide gas and nine parts of carbon dioxide. The process is said to destroy both the pests and their eggs.

* * *

Both oil and chemical resistance are claimed for a new rubber belting, said to be the first product of its kind. Tests are stated to have shown satisfactory operation after complete oil immersion for several days, it is said.

* * *

A protective coating for enameled or varnished interior walls has been developed. It seals the pores, thus preventing dust or grease from penetrating the wall finish. Colorless—it is said to contain no acid or alkali, to show no brush marks and to be removable with plain water without affecting the under-finish.

* * *

A novel viscometer consists of a vertical conical journal which revolves at constant speed in a bearing containing a channel which extends about 0.8 the distance around its face. The material to be tested, flowing in the direction of revolution, enters one end of the channel. About midway is the outlet and at the other end, a pressure gauge. The resulting pressure on the gauge is read in centistokes or any other desired viscosity units.

* * *

A non radio-active luminous paint has recently been put on the market which absorbs light-giving energy from daylight or artificial light and radiates it in the dark. It is applied indoors over a coating of white lacquer and for outdoor use can be protected from the elements by a coat of spar varnish.

* * *

A new lacquer linseed oil has been developed which is said to eliminate the necessity of using gums and plasticizers; to be perfectly miscible with oil, nitrocellulose and solvents, and quick drying.

It is being used in the manufacture of a lacquer-type sanding sealer. This sealer applied to new wood or over a previously filled wood, stops penetration of subsequent coats and prepares a particularly smooth surface for additional coats. It has fine sanding and polishing qualities.

* * *

Denatured Alcohol, Formula No. 5, or Proprietary Solvent Solox, is recommended as the refrigerant in a novel system for power boats. The refrigerating cycle is operated entirely by heat from the engine's exhaust.

* * *

A new dust helmet has been perfected for the protection of operators against dust and fumes. It is very light in weight and is carried from a sweatband around the head. The shoulders also support part of the weight. It is constructed of an aluminum frame and anode rubber hood. Air is supplied through a filter from a compressed air line or by means of a blower.

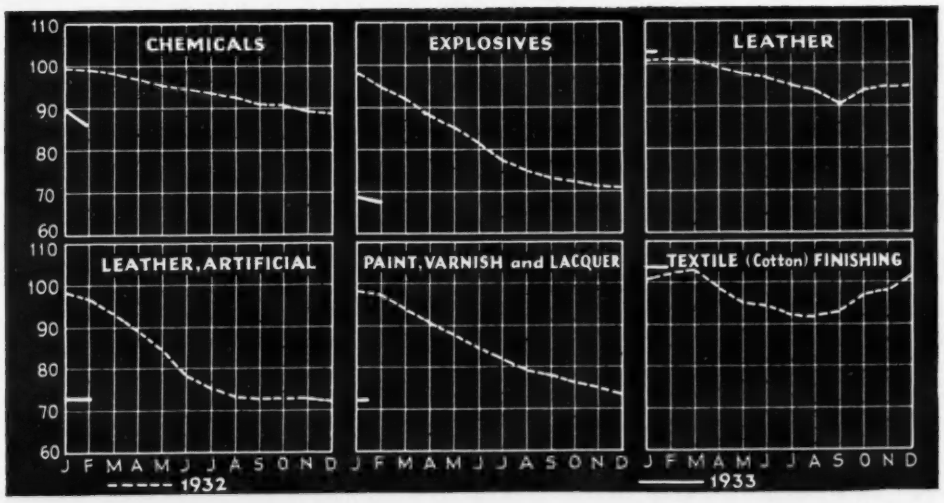
* * *

Denatured Alcohol is used as the vehicle of an aniline dye to manufacture inks suitable for printing on paper bags and sacks. Either Formula S.D. No. 1 or S.D. No. 3-A may be used.

* * *

Lacquers to prevent tarnishing, crystal spotting and stain spotting of plated articles have been studied and tested. The causes of these effects indicate that no one lacquer can prevent all of them and, at the same time, withstand outdoor exposure. Hence, in selecting the protective lacquer, the subsequent use of the article should be taken into consideration.

PRODUCTION TRENDS in major **SOLVENT-CONSUMING INDUSTRIES**
(moving twelve-month averages, 1931 = 100)



Production in Industry	*February*	*January*	*January-February* *1933*	*January-February* *1932*
CHEMICALS: index of production (1931 = 100)	86.4	89.0	87.7	88.5
EXPLOSIVES: 1000 lb	16,008	17,777	33,785	36,239
LEATHER: index of production (1931 = 100)		103.0		94.7
LEATHER, ARTIFICIAL: pyroxylin spread, 1000 lb.	2,374	2,307	4,681	4,529
PAINT, VARNISH, and LACQUER: sales ($1000)		$12,783		$32,165
LACQUERS only, 1000 gal	(quarterly reports)		16,460*	22,706*
TEXTILE (Cotton) FINISHING: 1000 yd	93,773	88,300	182,073	159,627

*Calendar years.

U.S. INDUSTRIAL ALCOHOL CO.
U.S. INDUSTRIAL CHEMICAL CO., INC.

WORLD'S LARGEST PRODUCERS OF ALCOHOL DERIVED SOLVENTS

ALCOHOLS
Amyl Alcohol
Ansol
Butyl Alcohol
Ethyl Alcohol
Anhydrous—Pure and Denatured
Commercial—Pure and Denatured
Fusel Oil—Crude and Refined
Methanol
Secondary Amyl Alcohol
Secondary Butyl Alcohol
Solox

ESTER SOLVENTS
Acetic Ether
Amyl Acetate
Butyl Acetate
Ethylene Glycol Monoethylether Acetate
Diatol
Diethyl Carbonate
Estersol
Ethyl Acetate
Ethyl Lactate
Secondary Amyl Acetate
Secondary Butyl Acetate

ETHER
Ether, Ethyl—USP. and Absolute

PLASTICIZERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate
Dimethyl Phthalate

NITROCELLULOSE SOLUTIONS
Collodions
Cotton Solutions

CELLULOSE ACETATE
Bulk and Solutions

ORGANIC CHEMICALS
Ethyl Acetoacetate
Ethyl Chlorocarbonate
Ethyl Oxalate
Ethylene
Sodium Oxalacetate

MISCELLANEOUS SOLVENTS
Acetone
Methyl Acetone

Executive Offices: 60 East 42nd Street, New York, N. Y. Branches in all Principal Cities

Dye, coaltar:—				
Color Index No.				
73 Sudan II	lb.	1.00	@	1.25
79 Ponceau 2R	lb.	.80	@	.90
88 Bordeaux B.	lb.	.90	@	.95
138 Metanil yellow	lb.	.75	@	.80
151 Orange II	lb.	.75	@	.85
165 Lake red C	lb.	1.15	@	1.25
176 Fast red A	lb.	.60	@	.75
179 Azo rubin	lb.	1.00	@	1.05
180 Fast red VR	lb.	1.50	@	1.65
189 Lake red R, paste	lb.	.85	@	.90
189 Lake red R, powdered	lb.	3.00	@	3.10
202 Chrome blue black U	lb.	.32	@	.40
204 Chrome black A	lb.	1.75	@	2.00
208 Fast red blue R	lb.	.75	@	2.00
216 Chrome red B	lb.	1.75	@	2.00
234 Resorcin brown B	lb.	.75	@	.80
235 Resorcin dark brown	lb.	.75	@	.80
246 Acid black 10B	lb.	.50	@	.70
252 Brilliant concent	lb.	.90	@	1.00
258 Sudan IV	lb.	1.00	@	1.25
262 Cloth red 2B	lb.	.60	@	.80
289 Fast cyanin 5R	lb.	.90	@	1.00
299 Chrome black F	lb.	.60	@	.65
307 Fast cyanin black B	lb.	.80	@	.85
326 Direct fast scarlet	lb.	2.00	@	2.25
331 Bismarck brown	lb.	.44	@	.46
332 Bismark brown 2R	lb.	.44	@	.46
364 Paper yellow	lb.	.83	@	.90
365 Chrysophenin G	lb.	.58	@	.70
382 Direct scarlet B	lb.	1.50	@	1.75
387 Direct violet B	lb.	1.00	@	1.30
394 Direct violet N	lb.	1.25	@	1.30
401 Developed black BHN	lb.	.50	@	.75
406 Direct blue 2B	lb.	.25	@	.30
415 Direct orange R	lb.	.60	@	.70
419 Direct fast red F	lb.	.75	@	.85
420 Direct brown M	lb.	1.00	@	1.10
448 Benzo purpurin 4B	lb.	.40	@	.42½
495 Benzo purpurin 10B	lb.	.40	@	.50
502 Direct azurin G	lb.	.75	@	.80
512 Direct blue RW	lb.	.80	@	1.00
518 Direct pure blue 6B	lb.	1.10	@	1.25
520 Direct pure blue	lb.	.50	@	1.00
539 Direct fast black FF	lb.	.75	@	1.00
581 Direct black EW	lb.	.25	@	.50
582 Direct black RX	lb.	.35	@	.45
593 Direct green B	lb.	.75	@	.90
594 Direct green G	lb.	1.00	@	1.05
596 Direct brown 3GO	lb.	.35	@	1.00
620 Direct yellow R	lb.	1.25	@	1.50
626 Fast light yellow 2G	lb.	2.00	@	3.00
666 Acid green B	lb.	1.50	@	1.75
680 Methyl violet	lb.	.85	@	.90
698 Acid violet	lb.	1.00	@	3.00
795 Phosphin	lb.	1.50	@	1.55
812 Primulin	lb.	.52	@	.62
814 Direct fast yellow	lb.	2.00	@	2.25
865 Nigrosin (water soluble)	lb.	.35	@	.50
Sulphur black	lb.	.20	@	.25
Sulphur blue	lb.	.40	@	1.00
Sulphur brown	lb.	.25	@	.50
Sulphur maroon	lb.	.40	@	—
Sulphur olive	lb.	.25	@	.54
Sulphur tan	lb.	.30	@	.50
Sulphur yellow	lb.	.30	@	.50
1177 Indigo, 20 p.c., paste	lb.	.15	@	.18
Benzo fast black L	lb.	.90	@	1.00
Zambesi blacks	lb.	.75	@	.80
Dyes, natural (see name of article).				

E

Echinacea root, bales	lb.	.15	@	.16
Egg yolk, granular, cases	lb.	.44	@	.43
spray, cases	lb.	.46	@	.47
Elder flowers, bright, bales	lb.	.14	@	.15
dark, bales	lb.	.12	@	.13
Elecampane root, bales	lb.	.05½	@	.06½
Elm bark, grinding, bales	lb.	.08	@	.08½
powdered, barrels, boxes	lb.	.13	@	.15
select, bundles, cases	lb.	.15	@	.16
Emetine hydrochloride, bottles, vials	oz.	11.00	@	11.25
Ephedra, bales	lb.	.05½	@	.06
Ephredrine, alkaloid, 100-oz. bottles	oz.	1.25	@	—
Hydrochloride, 100-oz. tins	oz.	1.00	@	—
Sulphate, 100-oz. tins	oz.	1.00	@	—
Epsom salt, domestic, technical, bags	100 lbs.	2.10	@	—
barrels	100 lbs.	2.20	@	—
U.S.P., car lots, bags	100 lbs.	2.15	@	—
car lots, barrels	100 lbs.	2.25	@	—
less car lots, bbls.	100 lbs.	2.60	@	3.00
dried, less car lots, bags	lb.	.06	@	.08
Imported, U.S.P., barrels	100 lbs.	2.00	@	2.25
bags, 100 lbs		1.90	@	—
Ergot, Russian, Polish, bags	lb.	.30	@	.31
Spanish, bags	lb.	.32	@	.35
Esorine salicylate, bottles, vials	oz.	20.00	@	21.00
Sulphate, bottles, vials	oz.	20.00	@	21.00
Ether, concentrated, drums	lb.	.08	@	—
U.S.P., anesthesia, drums	lb.	.22	@	.23
U.S.P., 1880, drums	lb.	.36	@	.37
washed, drums	lb.	.34	@	.35
Synthetic, car lots, works, drums	lb.	.08	@	—
less car lots, works, drums	lb.	.09	@	—
Acetic, drums	lb.	.11½	@	—
Nitrous, concentrated, bottles	lb.	.75	@	.77
Ethyl acetate, car lots, drums	lb.	.08½	@	—
less car lots, drums	lb.	.09	@	—
tankcars	lb.	.07½	@	—
takwagon	lb.	.07½	@	—
anhydrous, car lots, drums	lb.	.09	@	—
less car lots, drums	lb.	.10	@	—
tanks	lb.	.09	@	—
90 p.c., drums	lb.	.1090	@	—
99 p.c., U.S.P., drums	lb.	.12	@	—
Bromide, technical, drums	lb.	.50	@	.55
Chloride, drums	lb.	.22	@	.24
Cinnamate, bottles	lb.	3.40	@	4.50
Iodide, bottles	lb.	6.00	@	6.05
Lactate, less car lots, works, drums	lb.	.30	@	.33
Oxalate, drums	lb.	.37½	@	.50
cans	lb.	.52	@	.55
Oxybutyrate, drums, works	lb.	.30	@	.32½
Ethylbenzylaniliin, drums	lb.	.88	@	.90
Ethylene bromide, drums	lb.	.65	@	.70
Dichloride, drums, delivered	lb.	.06	@	.09
Ethyleneglycol, refined, drums	lb.	.25	@	.28
Monobutyl ether, car lots, works, drums	lb.	.20	@	—
less car lots, works, drums	lb.	.21	@	.23
tanks, works	lb.	.19	@	—
Monoethylether, car lots, works, drums	lb.	.15	@	—
less car lots, works, drums	lb.	.16	@	—
tanks, works	lb.	.14	@	—
Monoethyl ether acetate, car lots, works, drums	lb.	.16½	@	.17
less car lots, works, drums	lb.	.17½	@	.18
tanks, works	lb.	.15½	@	—
Ethylidin, anilin, drums	lb.	.45	@	.47½
Ethylmethyl ketone, drums	lb.	.12½	@	—
Ethylorthoparatoluenesulfonamide, barrels	lb.	.55	@	—
Ethylparatoluenesulphonamide, barrels	lb.	.60	@	—
Eucalyptol, cans	lb.	.50	@	.60
Eucalyptus leaves, bales	lb.	.05	@	.06
Eugenol, cans	lb.	1.90	@	2.40
Euphorbia pilulifera, bales	lb.	.06	@	.06½

F

Feldspar, powdered, works, bulk	ton.	15.00	@	21.00
Fennel seed, French, bags	lb.	.06½	@	.07
German, large, bags	lb.	.08½	@	.09
small, bags	lb.	.07½	@	.08
Fenugreek seed, bags	lb.	.03	@	.04
Fir, balsam, Canada, cans	gal.	5.00	@	9.25
Oregon, barrels	gal.	.70	@	.80
Fish berries, bags	lb.	.18	@	.15
Fish scrap, dried, unground, 11@12 p.c. ammonia and 15 p.c. bone phosphate, Chesapeake, factories, bulk	unit-ton.	2.00	&	.10
ground, 11@12 p.c. ammonia, 15 p.c. bone phosphate, f.o.b. Baltimore, bags	ton.	31.00	@	32.00
wet, acidulated, 6 p.c. ammonia, 8 p.c. phosphoric acid, factory, bulk, contracts	unit-ton.	1.50	&	.50
Flake, white, barrels, kegs	lb.	.09¾	@	.13¼
Fleaseed, French, black, bags	lb.	.08½	@	.09
Indian, blonde, bags	lb.	.04½	@	.04¾
Fluorspar, domestic, acid grade, 98 p.c., works	ton.	28.00	@	—
enameler's, 96 to 98 p.c., bags	ton.	30.00	@	—
ground, car lots, bulk, works	ton.	35.50	@	—
No. 1 standard ground, works, bulk	ton.	27.50	@	—
bags	ton.	31.50	@	—
No. 2, lump, works	ton.	12.00	@	14.00
washed, gravel, 85 and 5, bulk, works	ton.	12.00	@	14.00
ground, bags, works	ton.	26.50	@	—
imported, 97 p.c., powdered, bags	ton.	27.50	@	29.50
Formaldehyde, car lots, works, barrels	lb.	.06	@	—
less car lots, barrels	lb.	.06½	@	.07
Formaldehydesulin, drums	lb.	.37½	@	.40
Fringetree bark, bales	lb.	.10	@	.11
Fuller's earth, domestic, mines, bulk	ton.	15.00	@	20.00
imported, powdered, car lots, bags	ton.	24.00	@	26.00
Furfural, tech., contract, 150,000 lbs., works	lb.	.10	@	—
car lots, works, drums	lb.	.12½	@	—
refined, car lots, drums, works	lb.	.15	@	—
less car lots, drums, works	lb.	.17½	@	.25
Fusel oil, crude, drums	lb.	.14½	@	—
refined, drums	lb.	.245	@	.281
Fustic extract, crystals, barrels	lb.	.18	@	.22
liquid, 51 deg., barrels	lb.	.08	@	.10
42 deg., barrels	lb.	.07	@	.09
solid, drums	lb.	.14	@	.16
sticks, shipments	ton.	25.00	@	28.00

G

G salt, barrels	lb.	.42	@	.43
Galangal root, bales	lb.	.08	@	.09
Gall extract, barrels	lb.	.18	@	.20
Gambier, common, bags	lb.	.03½	@	.06
plantation, bags	lb.	.07¾	@	.08
Singapore, cubes, bags	lb.	.05	@	.06½
Extract, bbls.	lb.	.08	@	.10
Gasoline, at refinery, Bayonne, U. S. Motor below 65 octane, tanks	gal.	.04¾	@	—
branded qualities	gal.	.05	@	—
California, 56-58, 375 e.p.	gal.	.06	@	.07
Gulf Coast, U. S. Motor, export, bulk	gal.	.03¾	@	—
60-62, 390 e.p., export, bulk	gal.	.03¾	@	—
60-62, 400 e.p., export, bulk	gal.	.03¾	@	—
64-66, 375 e.p., export, bulk	gal.	.03¾	@	—
Louisiana - Arkansas 58-60, 450 e.p.	gal.	.02½	@	.02¾
58-60, 437 e.p., U.S. Motor	gal.	.02¾	@	.02⅞
64-66, 375 e.p.	gal.	.03¼	@	.03¾
68-70, 350 e.p.	gal.	.03¼	@	.03½
Oklahoma-Texas, U. S. Motor, 437 e.p., 122 l.b.p., 57 octane	gal.	.02	@	.02¼
57-64 octane	gal.	.02½	@	.02⅝
65 octane	gal.	.02½	@	.02⅝
60-62, 400 e.p.	gal.	.02½	@	.02⅝
64-66, 390 e.p.	gal.	.02½	@	.02½
64-66, 375 e.p.	gal.	.02½	@	.02¾
68-70, 350 e.p.	gal.	.02⅝	@	.02⅞
Natural, 11-12 vapor pressure	gal.	.03¼	@	.03⅜
14-16 vapor	gal.	.02⅜	@	.03
16-18 vapor	gal.	.02¼	@	.02½
22-24 vapor	gal.	.02	@	.02¼
26-30 vapor	gal.	.01⅜	@	.01½
Pennsylvania, 52-54, 450 e.p., naphtha	gal.	.04¾	@	.04¾
58-60, 437 e.p., 122 l.b.p., U.S. Motor	gal.	.04¾	@	.04⅞
60-62, 400 a.p.s.r.	gal.	.04⅞	@	.04¾
64-66, 390 e.p.	gal.	.04⅞	@	.05¼

Gasoline, tankwagon and service station prices (State tax included):—

	T.W.	S.S.
Atlanta	gal. .20	.22
Boston	gal. .13	.13
Chicago	gal. .15	.15
Cincinnati	gal. .125	.145
Denver	gal. .18	.19
Louisville	gal. .17	.18
Minneapolis	gal. .144	.154
New Orleans	gal. .155	.155
New York	gal. .145	.145
San Francisco	gal. .145	.18

Gelatin, silver, cases	lb.	.49	@	.55
Gelsenium root, bales	lb.	.06½	@	.07
Gentian root, bales	lb.	.17	@	.18
ground, barrels, boxes	lb.	.18	@	.19
powdered, barrels, boxes	lb.	.19	@	.20
Geraniol, cans	lb.	1.25	@	3.00
Geranyl acetate, bottles	lb.	2.50	@	4.00
Ginger root, African, bags	lb.	.03¼	@	.03½
Cochin lemon, bags	lb.	.03¾	@	.04
Jamaica, fancy, bold, bags	lb.	.14	@	.14½
medium, bold, bags	lb.	.12	@	.12½
grinding, dark, bags	lb.	.08½	@	.09
bright, bags	lb.	.09	@	.09½
Japanese, bags	lb.	.06½	@	.07
Ginseng root, cultivated, cases	lb.	2.00	@	4.00
wild, Southern, cases	lb.	6.00	@	7.00
fibers, cases	lb.	1.75	@	2.00
Glauber's salt, domestic, car lots, works, bulk	ton.	15.00	@	—
bags	100 lbs.	1.00	@	—
barrels	100 lbs.	1.10	@	—
less car lots, bags	100 lbs.	1.10	@	1.60
barrels	100 lbs.	1.25	@	1.70
imported, bags	100 lbs.	.75	@	1.10
anhydrous (see Soda sulphate).				
Glue:—				
Bone, common grades, car lots, bags	lb.	.06	@	.10
better grades, car lots, bags	lb.	.09	@	.14
Casein, kegs	lb.	.18	@	.22
Hide, high-grade, car lots, bags	lb.	.16	@	.24
medium grade, car lots, bags	lb.	.12	@	.16
low grade, car lots, bags	lb.	.10	@	.14
Imported, medal, bags	lb.	.12	@	.16
Glycerin, C.P., drums extra	lb.	.10¼	@	.10¼
cans	lb.	.11¾	@	.12
dynamite, car lots, drums included	lb.	.07½	@	.07¾
less car lots, drums included	lb.	.08¼	@	.08½
saponification, loose, drums	lb.	.05	@	.05½
soaplye, loose, drums	lb.	.04½	@	.04¾
30 degrees, yellow, drums	lb.	.08¼	@	.08¾
Glycol stearate, drums	lb.	.18	@	—
Golden seal root, bales	lb.	.55	@	.60
powdered, boxes	lb.	.85	@	.90
Grains of paradise, bags	lb.	.08½	@	.09½
Graphite, amorphous, barrels	lb.	.04	@	.10
flake, barrels	lb.	.05	@	.15
lubricating grades, cans	lb.	.25	@	.75
Gray powder (see Mercury and chalk.)				
Grease—				
House, tierces	lb.	.02	@	.02½
White, tierces	lb.	.02½	@	.03⅝
Yellow, tierces	lb.	.02⅜	@	.02¼
Wool (see Adeps lanae and Degras.)				
Green—				
Chrome, C.P., dark, barrels	lb.	.28	@	.33
light, barrels	lb.	.23	@	.25½
medium, barrels	lb.	.26	@	.27½
in japan, cans	lb.	.48	@	—
in oil, cans	gal.	6.34	@	—
Chrome oxide, domestic, bbls.	lb.	.19	@	.21
imported, kegs	lb.	.20	@	.22
Commercial, barrels	lb.	.06¼	@	.10
in oil, 25 p.c., cans	lb.	.27	@	.29
Grinders', barrels	lb.	.08	@	.10
Jobbers', barrels	lb.	.06¼	@	.07
Limeproof, kegs	lb.	.09¼	@	.15
Paris (see P).				
Verdigris (see V).				
(Green dyes are listed under Dye.)				
Grindelia robusta, bales	lb.	.06½	@	.07
Guaiac resin, cases	lb.	.18	@	.20
strained, cases	lb.	.70	@	.71
Wood	lb.	.04	@	.05
Guaiacol, liquid, demijohns	lb.	1.55	@	1.65
Carbonate, boxes, kegs	lb.	1.80	@	1.83
Guarana, powdered, cases	lb.	.50	@	.55
Gum, Aloe (see A).				
Ammoniac, tears, cases	lb.	.50	@	.55
Arabic, amber sorts, cleaned, bags	lb.	.06	@	.06½
white sorts, No. 1 bags	lb.	.14	@	.15
No. 2 bags	lb.	.13	@	.14
powdered, barrels, kegs	lb.	.08½	@	.12
Asafetida (see A).				
Asphaltum (see A).				
Benzoin, Siam, cases	lb.	1.05	@	1.45
Sumatra, cases	lb.	.17	@	.20
Camphor (see C).				
Chicle, bags	lb.	.20	@	.21
Copal, Congo, Amber, pale, bags	lb.	.08	@	.10
dark, bags	lb.	.06	@	.08
sorts, bold, bags	lb.	.04¾	@	.05¼
kettle size, bags	lb.	.04½	@	.05½
chips, bags	lb.	.03½	@	.04½
dust, bags	lb.	.02½	@	.03½
Ivory, opaque, bold, bags	lb.	.18	@	.20
kettle size, bags	lb.	.13	@	.14
kettle size No. 2, bags	lb.	.10	@	.12
sorts, bags	lb.	.05½	@	.06
Pale, bags	lb.	.20	@	.25
selected, hard	lb.	.15	@	.18
Picture, bags	lb.	.35	@	.40
East India, Batu, scraped, bags	lb.	.04½	@	.05¼
unscraped, bags	lb.	.03½	@	.04½
nubs and chips, bags	lb.	.03	@	.04
Black, bold scraped, bags	lb.	.05½	@	.06
unscraped, bags	lb.	.03¾	@	.04½
nubs and chips	lb.	.03½	@	.04
Pale, bold, Singapore, bags	lb.	.12½	@	.14
Macassar, bags	lb.	.11	@	.11½
nubs, Singapore, bags	lb.	.07¼	@	.08
Macassar, bags	lb.	.07½	@	.08
chips, bags	lb.	.04½	@	.06
Manila, Loba A, baskets	lb.	.09	@	.10
Loba B, baskets	lb.	.08	@	.09
Loba C, baskets	lb.	.07	@	.08
Loba D, baskets	lb.	.06	@	.07
Loba Du, baskets	lb.	.05½	@	.06
CBB, baskets	lb.	.06	@	.07
CNE, baskets	lb.	.05¼	@	.06½
DBB, baskets	lb.	.05¾	@	.06¾
DK, baskets	lb.	.04¾	@	.05¼
Dust, baskets	lb.	.03½	@	.04½
MA, baskets	lb.	.05	@	.05½
MB, baskets	lb.	.04½	@	.05
WS, baskets	lb.	.06½	@	.07¼
Pontianak, genuine, bold, bags	lb.	.14	@	.15
chips, bags	lb.	.05	@	.06
split, bags	lb.	.10¾	@	.11½
nubs, bags	lb.	.08¾	@	.09½
mixed, bold, bags	lb.	.06¾	@	.07½
Dammar, Batavia, A/E, cases,	lb.	.08½	@	.09½
A/D, mixed, cases	lb.	.09¾	@	.11½
E, cases	lb.	.05½	@	.06
dust	lb.	.04	@	.05
Singapore, No. 1, cases	lb.	.09½	@	.10
No. 2, cases	lb.	.07	@	.07½
No. 3, cases	lb.	.04½	@	.05
chips, cases	lb.	.05½	@	.06
dust, cases	lb.	.04	@	.05
Elemi, No. 1, cans	lb.	.09½	@	.10
No. 2, cans	lb.	.09	@	.10
Ester, dark, barrels	lb.	.04¾	@	.05¼
light, barrels	lb.	.05	@	.05½
Euphorbium, cases	lb.	.18	@	.19
Galbanum, cases	lb.	.75	@	.85
Gamboge, pipe, cases	lb.	.45	@	.50
powdered, barrels	lb.	.55	@	.65
Ghatti, soluble, bags	lb.	.08½	@	.09½
superior, bags	lb.	.06	@	.07
Guaiac (see G).				
Karaya, powdered, barrels, boxes, drums, XXX	lb.	.20	@	.25
XX	lb.	.15	@	.16
No. 1	lb.	.09	@	.12
No. 2	lb.	.08	@	.09
Kauri, Brown, scraped, cases,	lb.	.30	@	.40
No. 1, cases	lb.	.20	@	.25
No. 2, cases	lb.	.12½	@	.16
No. 3, cases	lb.	.11½	@	.13
Chips, cases	lb.	.06½	@	.08¾
Dust, cases	lb.	.04	@	.06
White, No. 1, pale, cases	lb.	.52	@	.56
No. 1 ordinary, cases	lb.	.38	@	.42
No. 2 ordinary, cases	lb.	.20	@	.25
No. 3 ordinary, cases	lb.	.13	@	.15
Chips, cases	lb.	.11	@	.14
Dust, cases	lb.	.08	@	.12
Kino, tins	lb.	.48	@	.50
Mastic, cases	lb.	.26¾	@	.27
Myrrh, U.S.P., cases	lb.	.19	@	.20
Olibanum, siftings, cases	lb.	.05½	@	.07
tears, cases	lb.	.09	@	.19
Opium (see O).				
Paracoumarone (see P).				
Rosin (see R).				
Sandarac, casks	lb.	.21	@	.22
Scammony, cases	lb.	1.10	@	1.25
Senegal, picked, bags	lb.	.14	@	.16
sorts, bags	lb.	.05¾	@	.06¼
Teiba, bags	lb.	.03½	@	.04
Thus, barrels	280 lbs.	7.75	@	8.00
strained, barrels	280 lbs.	7.75	@	8.00
Tragacanth, Aleppo:—				
No. 1, cases	lb.	.65	@	.70
No. 2, cases	lb.	.50	@	.55
No. 3, cases	lb.	.28	@	.30
No. 4, cases	lb.	.15	@	.20
No. 5, bags	lb.	.10	@	.15
No. 6, bags	lb.	.08	@	.09
sorts, bags	lb.	.07	@	.08
Yucca, bags	lb.	.03	@	.04

H

Heliotropin, crystals, cans	lb.	1.75	@	2.00
Hellebore root, white, powdered, barrels	lb.	.08½	@	.09
Hematine, crystals, barrels	lb.	.10	@	.17
Hemlock extract, 26 p.c. tannin, barrels	lb.	.02¾	@	—
Hempseed, Manchurian, bags	lb.	.02¾	@	.03
Henbane leaves, bales	lb.	.08	@	.08¼
Henna leaves, bales	lb.	.06½	@	.07¾
powdered, barrels, boxes	lb.	.08	@	.13
Heptane, mixed, 75-115 deg. C, Group 3, tankcars	gal.	.10	@	—
car lots, drums	gal.	.12	@	—
l.c.l., drums	gal.	.13	@	—
normal, 88-100 deg. C, Group 3, tankcars	gal.	.12	@	—
car lots, drums	gal.	.14	@	—
l.c.l., drums	gal.	.15	@	—
Hexalin, drums	lb.	.30	@	—
Hexane, normal, 60-70 deg. C, Group 3, tankcars	gal.	.11	@	—
car lots, drums	gal.	.13	@	—
l.c.l., drums	gal.	.14	@	—
laboratory grade, Group 3, car lots, drums	gal.	.17	@	—
l.c.l., drums	gal.	.28	@	—
Hexamethylenetetramine, U.S.P., drums, 1,000-lb. lots	lb.	.46	@	.47
technical, drums	lb.	.37	@	—
Homatropine hydrobromide, bottles, vials	oz.	13.00	@	13.50
Hoofmeal, f.o.b. Chicago, unit-ton.		.90	@	1.00
imported, to arrive	unit-ton.	1.40	@	1.50
Hops, domestic, bales	lb.	.37	@	.40
imported, bales	lb.	.60	@	.65
Horehound, bales	lb.	.06½	@	.07
Hydrangea root, bales	lb.	.06½	@	.07
Hydrastine, alkaloid, vials	oz.	9.00	@	9.50
Hydrochloride, vials	oz.	9.00	@	9.50
Sulphate, vials	oz.	11.00	@	11.50
Hydrastis (see Golden seal).				
Hydrogen peroxide, U.S.P., barrels	lb.	.03¾	@	.04
bottles	gross.	6.75	@	15.25
100 volume, carboys	lb.	.20	@	—
Hydroquinone, barrels, kegs	lb.	1.10	@	1.15
Hyoscine hydrobromide, vials	oz.	13.00	@	13.25
Hyoscyamine alkaloid, vials	oz.	15.00	@	—
Hydrobromide, vials	oz.	15.00	@	—
Sulphate, vials	oz.	15.00	@	—
Hypernic, solid, drums	lb.	.17	@	.20
liquid, 51 deg., barrels	lb	.11	@	.15

I

Iceland moss, bales	lb.	.07½	@	.09
Ichthyol, bottles	lb.	4.00	@	4.25
Indian red (see Red Indian).				
Indigo, Madras, barrels	lb.	1.25	@	1.30
synthetic, liquid, barrels	lb.	.12	@	—
Indol, C.P., bottles	lb.	31.00	@	33.00
Infusorial earth (see Diatomaceous earth).				
Insect flowers (see Pyrethrum).				
Iodine, crude, kegs	lb.	1.95	@	—
resublimed, kegs	lb.	2.65	@	2.70
Iodoform, 300 lbs. to 100 lbs., kegs	lb.	4.50	@	4.65
Ionone, bottles	lb.	8.50	@	8.25
Ipecac root, whole, bags	lb.	.70	@	.75
powdered, boxes	lb.	.80	@	.85
Irish moss, ordinary, bales	lb.	.05	@	.06
bleached, prime, bales	lb.	.07	@	.08
Iron chloride, crystals, technical, barrels, kegs	lb.	.04½	@	.07
U.S.P., barrels	lb.	.07½	@	.08
solution, carboys	lb.	.06½	@	.06¾
Citrate, U.S.P., VIII, pearls, cans	lb.	.72	@	—
powder, cans	lb.	.84	@	—
scales, cans	lb.	.77	@	—
Hypophosphite, cans	lb.	1.45	@	1.50
Iodide, bottles	lb.	3.10	@	3.15
sryup, demijohns	lb.	.40	@	.45
Nitrate, commercial, kegs	lb.	.02¾	@	.03
Oxalate, powdered, kegs	lb.	.47	@	.50
scales, cans	lb.	.85	@	.90
pearls, cans	lb.	.90	@	.95
Oxide (see Black, Red, etc.).				
Phosphate, ferric, pearls, cans,	lb.	.54	@	—
scales, cans	lb.	.59	@	—
ferrous, cans	lb.	.25	@	—
Pyrophosphate, pearls, cans	lb.	.59	@	—
scales, cans	lb.	.64	@	—
Reduced, 90 percent, cases	lb.	.65	@	.70
Sulphate, tech. (see Copperas).				
U.S.P., crystals, barrels	lb.	.03¾	@	.04
Iron-ammonia citrate, brown scales, cans	lb.	.47	@	.48
granular, cans	lb.	.42	@	.48
pearls, can	lb.	.42	@	.48
green, scales, cans	lb.	.47	@	.48
granular, cans	lb.	.42	@	.48
pearls, cans	lb.	.42	@	.48
Iron-ammonia oxalate, crystals, barrels, kegs	lb.	.25½	@	.27½
Iron-potash oxalate, crystals, barrels, kegs	lb.	.32½	@	.40
Iron-soda oxalate, barrels, kegs,	lb.	.25½	@	.27¼
Isoeugenol, bottles	lb.	2.85	@	2.80
Isopentane, works, drums	lb.	.48	@	—
small lots	lb.	.58	@	—
Isopropyl ether, car lots, drums,	lb.	.07	@	—
less car lots, drums	lb.	.08	@	—
tanks	lb.	.06	@	—

J

Jaborandi leaves, bales	lb.	.10	@	.11
Jalap root, bales	lb.	.14	@	.28
powdered, barrels, boxes	lb.	.19	@	.23
Juniper berries, bags	lb.	.04½	@	.05

K

Kamala, tins	lb.	.19	@	.20
Kava kava root, bales	lb.	.13½	@	.14
Kerosene, at refinery, Bayonne, S.W. export, bulk	gal.	.05¼	@	—
cases	gal.	.176	@	—
W. W., bulk	lb.	.05¼	@	—
export, bulk	gal.	.05½	@	—
cases	gal.	.18	@	—
Gulf ports, export, prime white, bulk—gal.		.03¾	@	—
water white, bulk	gal.	.03¾	@	—
Louisiana - Arkansas, 41-53 water white, bulk	gal.	.03	@	.03¼
Oklahoma-Texas, 41-43 water white	gal.	.02½	@	.02¾
42-44, water white	gal.	.02¾	@	.02⅞
Pennsylvania, 45 water white	gal.	.04½	@	.04⅝
46, water white	gal.	.04½	@	.04⅝
Kerosene, tankwagon prices:—				
Atlanta	gal.	.11	@	—
Boston	gal.	.10	@	—
Chicago	gal.	.10	@	—
Cincinnati	gal.	.12	@	—
Denver	gal.	.125	@	—
Louisville	gal.	.09	@	—
Minneapolis	gal.	.11	@	—
New Orleans	gal.	.11	@	—
New York	gal.	.09	@	—
San Francisco	gal.	.155	@	—
Kerosene distillate (see Oil, furnace).				
Kieselguhr (see Earth, diatomaceous)				
Kola nuts, bags	lb.	.04½	@	.06

L

Lady slipper root, bales	lb.	.30	@	.40
Lanolin (see Adeps lanae).				
Lard, city, tierces	100 lbs.	4.50	@	4.60
comp

Lavender flowers, ord., bales	lb.	.14 @	.20
select, bales	lb.	.27 @	.30
Lead (see daily quotations in market report).			
Acetate, brown, broken, barrels	lb.	.08½@	.09½
white, broken, barrels	lb.	.10 @	.11¼
crystals, barrels	lb.	.09½@	.10½
granular, barrels	lb.	.10 @	.11
powdered, barrels	lb.	.10½@	.11¼
Arsenate, powdered, drums	lb.	.09 @	.10½
Blue, sublimated (see Lead, white, basic sulphate).			
Carbonate (see Lead, white).			
Chloride, pure, boxes	lb.	.46 @	—
Iodide, jars	lb.	2.50 @	2.55
Linoleate, solid, barrels	lb.	.26 @	.26½
Nitrate, barrels	lb.	.10 @	.23
Oleate, barrels	lb.	.15 @	—
Red, dry, casks	lb.	.06¾@	—
100-lb. kegs, less than 500 lbs.	lb.	.095 @	—
500 to 2,000 lbs.	lb.	.0855@	—
2,000 to 10,000 lbs.	lb.	.08037@	—
10,000 to 30,000 lbs.	lb.	07464@	—
car lots, minimum 15 tons.	lb.	.07372@	—
in oil, steel kegs, less than 500 lbs.	lb.	.11½@	—
500 to 2,000 lbs.	lb.	.1035@	—
2,000 to 10,000 lbs.	lb.	.09729@	—
10,000 to 30,000 lbs.	lb.	09036@	—
car lots, minimum 15 tons.	lb.	08942@	—
Resinate, precip., barrels	lb.	.18 @	.18½
fused, barrels	lb.	.09 @	.10
Stearate, barrels	lb.	.22 @	.23
Sulphate, barrels, works. (See also Lead, white.)	lb.	.06 @	—
White, dry, basic carbonate, American, casks	lb.	.06 @	—
basic, sulphate, casks	lb.	.05½@	—
in oil, 100-lb. kegs, less than 500 lbs.	lb.	.11 @	—
500 to 2,000 lbs.	lb.	.0990@	—
2,000 to 10,000 lbs.	lb.	.09306@	—
10,000 to 30,000 lbs.	lb.	.08642@	—
car lots, minimum 15 tons.	lb.	08553@	—
Lemon peel, bales	lb.	.08½@	.09
Licorice extract, mass, cases	lb.	.19½@	.20
powdered, barrels	lb.	.29 @	.40
Root, bales	lb.	.04½@	.05
powdered, barrels, boxes	lb.	.07¼@	.08
select, cases	lb.	.11 @	.20
Lime, lump, works, barrels	bbl.	1.70 @	2.20
bulk	ton.	8.50 @	9.00
Chlorinated (see Bleaching powder.)			
Lime salts (see Calcium.)			
Lime-sulphur solution, bbls	gal.	.15 @	.19
Linalool, cans	lb.	1.65 @	2.00
Linalyl acetate, bottles	lb.	2.00 @	3.50
Linden flowers, with leaves, bales	lb.	.12 @	.13
without leaves, bales	lb.	.14 @	.15
Linseed, cake, bags	ton.	17.50 @	18.00
Meal, bags	ton.	24.00 @	25.50
Lithage, assayer's casks	lb.	.07¾@	—
commercial, powd., casks	lb.	.05¾@	—
steel kegs, less than 500 lbs.	lb.	.095 @	—
500 to 2,000 lbs.	lb.	.0855@	—
2,000 to 10,000 lbs.	lb.	.08037@	—
10,000 to 30,000 lbs.	lb.	.07464@	—
car lots, minimum 15 tons	lb.	07372@	—
Lithium bromide, jars	lb.	1.60 @	1.65
Carbonate, barrels	lb.	1.25 @	1.30
Citrate, barrels	lb.	1.40 @	1.50
Iodide, bottles, jars	lb.	4.55 @	4.60
Lithopone, domestic, two-ton lots, bags	lb.	.04½@	—
barrels	lb.	.04¾@	—
under two tons, bags	lb.	.04¾@	—
barrels	lb.	.05 @	—
Imported, ex dock, barrels	lb.	.04¾	Nom.
ex warehouse, barrels	lb.	.05½@	.05¾
Liverwort leaves, bales	lb.	.13 @	.14
Lobelia, bales	lb.	.15½@	.19
Seed, bags	lb.	.21 @	.32
Logwood extract, crystals, barrels	lb.	.10 @	.17
liquid, 51 deg., barrels	lb.	.05 @	.09
solid, boxes	lb.	.08 @	.14
Sticks, Haitian, shipment	ton.	24.00 @	25.00
Lovage root, domestic, bales	lb.	.20 @	.25
Imported, bales	lb.	.15 @	.16
Lupulin, N.F., tins	lb.	1.00 @	5.00
Lycopodium cases	lb.	.19 @	.21

M

Mace, Banda, cases	lb.	.33 @	.34
Batavia, No. 2, cases	lb.	.21 @	.22
Siauw, No. 1, cases	lb.	.29 @	.30
Madder, Dutch, bags	lb.	.22 @	.25
Magnesia, arsenate, car lots, bags (cased)	lb.	.20 @	—
Carbonate, technical, car lots, works, bags	lb.	.05¾@	.06
U.S.P., car lots, barrels	lb.	.07¾@	.08
Calcined, heavy, pharmaceutical, barrels	lb.	.50 @	—
technical, barrels	lb.	.04 @	—
light, extra, barrels	lb.	.36 @	.40
standard, barrels	lb.	.30 @	—
Chloride flake, domestic, works	ton.	34.00 @	38.00
Hypophosphite, cans	lb.	1.05 @	1.10
Palmitate, barrels	lb.	.19 @	.23
Peroxide, 15%, works, drums	lb.	1.05 @	1.10
Silicate (see Talc).			
Silicofluoride, barrels	lb.	.08¾@	.09¼
Stearate, barrels	lb.	.17 @	.20
car lots, barrels	lb.	.16½@	—
Sulphate (see Epsom Salt).			
Magnesite, calcined, barrels	ton.	46.00	@56.00
Malva flowers, black, bales	lb.	.17 @	.18
blue, bales	lb.	.55 @	.60
Leaves, bales	lb.	.12 @	.13
Manaca, root, bales	lb.	.18 @	.19
Mandrake root, bales	lb.	.08 @	.08½
Manganese borate, tech., bbls	lb.	.15 @	.16
Chloride, barrels	lb.	.07 @	.07½
Dioxide, technical, drums	lb.	.03¾@	.04½
85 p.c., barrels	lb.	.02¾@	.03¼
U.S.P., precipitated, kegs	lb.	.35 @	.52
Glycerophosphate, 100-lb. lots, barrels, cans	lb.	2.60 @	2.65
Iodide, bottles, jars	lb.	5.30 @	5.35
Linoleate, liquid, drums	lb.	.18 @	.19½
solid, barrels	lb.	.18 @	.19
Ore, powdered or granulated, 75@80 p.c., barrels	lb.	.02½@	.03
80@85 p.c., barrels	lb.	.02¾@	—
85@88 p.c., barrels	lb.	.02¾@	.03½
Resinate, fused, barrels	lb.	.08¼@	.08½
precipitated, barrels	lb.	.11½@	.12¼
Sulphate, works, barrels	lb.	.07 @	.08
anhydrous, works, barrels	lb.	.08 @	.08½
Mangrove bark, ship, bags	ton.	24.00	@25.00
Extract, 55 p.c., bags	lb.	.04 @	—
Manna flakes, large, cases	lb.	.40 @	.45
small, cases	lb.	.23 @	.25
Marble flour, bags	ton.	12.00	@14.00
Marjoram, French, bales	lb.	.19 @	.20
German, bales	lb.	.20 @	.21
Matico, leaves, bales	lb.	.18 @	.20
Menthol, cases	lb.	2.90 @	3.00
synthetic, cases	lb.	2.25 @	2.50
Mercurial mass (see Blue Mass).			
Ointment, 30 p.c., cans	lb.	.64 @	—
33⅓ p.c., cans	lb.	.72 @	—
50 p.c., cans	lb.	.91 @	—
Mercury (see Quicksilver).			
Bichloride (see Corrosive sublimate).			
Bisulphate, kegs	lb.	1.13 @	—
Chloride (see Calomel).			
Iodide, red, jars, kegs	lb.	3.50 @	3.55
yellow, jars, kegs	lb.	3.60 @	3.65
Nitrate ointment (see Citrine ointment).			
Mercury oxide, black, drums, kegs	lb.	3.58 @	—
red (see Red precipitate).			
yellow, tech., dom., bbl	lb.	1.10 @	—
U.S.P., drums, kegs	lb.	1.54 @	—
Mercury and chalk, kegs	lb.	.64 @	.65
Metal leaf (in packages of 20 books—500 leaves):—			
Aluminum, 5½x5½ in.	pkg.	1.30 @	1.40
Composition, 5½x5½ in.	pkg.	1.40 @	1.50
Gold, XX deep, 3⅜x3⅜ in.	pkg.	10.50 @	12.50
imported, 3⅜x3⅜ in.	pkg.	10.25 @	10.50
3⅜x3⅜ in.	pkg.	11.50 @	13.00
4 x4 in.	pkg.	14.50 @	14.70
3⅜@5¼ in.	pkg.	17.50 @	18.50
3⅜x5¼ in.	pkg.	18.25 @	19.20
Silver, 3⅜@3⅜ in.	pkg.	2.25 @	2.35
Metanitroaniiin, kegs	lb.	.67 @	.69
Metanitroparatoluidin, barrels	lb.	1.40 @	1.45
Metaphenylenediamine, kegs	lb.	.82 @	.84
Metatoluylenediamine, kegs	lb.	.67 @	.69
Methanol, crude, divd. tanks	gal.	.20 @	—
denaturing grade, tanks	gal.	.35 @	—
95 p.c., car lots, barrels	gal.	.41 @	—
drums included	gal.	.37 @	—
less car lots, barrels	gal.	.43 @	—
drums included	gal.	.39 @	—
tanks	gal.	.33 @	—
97 p.c., car lots, barrels	gal.	.42 @	—
drums included	gal.	.38 @	—
less car lots, barrels	gal.	.44 @	—
drums included	gal.	.40 @	—
tanks	gal.	.34 @	—
purified, car lots, barrels	gal.	.43½@	—
drums inclued	gal.	.39½@	—
less car lots, barrels	gal.	.45½@	—
drums included	gal.	.41½@	—
tanks	gal.	.35½@	—
synthetic, 99½ p.c., car lots, spot, drums	gal.	.39½@	—
less car lots	gal.	.41½@	—
tanks	gal.	.35½@	—
Methyl acetate, domestic, 98-100 p.c., drums	lb.	.17 @	.17½
imported, drums	lb.	.17 @	.17½
synthetic, 410-lb. drums, car lots	lb.	.15 @	—
less car lots	lb.	.16 @	—
tanks	lb.	.14 @	—
Acetone, car lots, drums	gal.	.45 @	—
less car lots, drums	gal.	.47 @	—
tanks	gal.	.43 @	—
synthetic, car lots, drums	gal.	.45 @	—
less car lots, drums	gal.	.47 @	—
tanks	gal.	.43 @	—
Anthranilate, bottles	lb.	2.10 @	2.20
Benzoate, bottles	lb.	1.25 @	2.00
Chloride, cylinders	lb.	.45 @	—
Cinnamate, bottles	lb.	3.00 @	4.00
Salicylate, drums	lb.	.40 @	.43
tins	lb.	.42 @	.45
Methylanthraquinone, bbls	lb.	.65 @	.67
Methylene blue, med., kegs	lb.	2.00 @	2.25
Methylheptenone, bottles	lb.	3.50 @	4.50
Methylheptin carb., bottles	oz.	1.25 @	2.50
Methylehexyl ketone, pure, works, drums	lb.	1.20 @	—
Mica, dry ground, wks., bgs.	ton.	65.00	@80.00
wet ground, works, bags	ton.	110.00	@115.00
Michler's ketone, kegs	lb.	2.50 @	—
Milk powder, skimmed, roller, car lots, barrels	lb.	.05½@	—
less car lots, barrels	lb.	.06 @	.06½
spray, car lots, barrels	lb.	.06 @	—
less car lots, barrels	lb.	.06½@	.07
unskimmed, roller, car lots, barrels	lb.	.14 @	—
less car lots, barrels	lb.	.15 @	.16
spray, car lots, barrels	lb.	.15 @	—
less car lots, barrels	lb.	.16 @	.17
Millet seed, bags	lb.	.03 @	.03½
hulled, bags	lb.	.03½@	.03¾
Mineral thinner (see Petroleum spirits and V.M.P. naphtha).			
Monochlorbenzene, drums	lb.	.06 @	.06½
Monoethylaniiin, drums	lb.	.77 @	.79
Monomethyl para-aminosulphate, drums	lb.	3.75 @	4.00
Morphine acetate, bottles	oz.	7.80 @	7.85
Alkaloid, cans	oz.	9.65 @	9.70
Ethylhydrochloride, vials	oz.	9.25 @	9.30
Hydrobromide, cans	oz.	7.75 @	7.80
Sulphate, cans	oz.	7.75 @	7.80
Mullein flowers, cans	lb.	.90 @	.95
leaves, bales	lb.	.07 @	.08
Musk, natural, Cabardine, grained, bottles	oz.	No stocks	
pods, bottles	oz.	12.50	@13.00
Tonquin, grained, bottles	oz.	20.00	@21.00
pods, bottles	oz.	12.50	@13.00
synthetic, ambrette, cans	lb.	5.65 @	6.00
ketone, cans	lb.	5.50 @	6.50
xylol, 100 p.c., cans	lb.	1.90 @	2.85
Musk root, bales	lb.	.06 @	.07
Mustard seed, Bari, brown	lb.	.10 @	.10½
Bombay, brown, bags	lb.	.06½@	.07
California, brown, bags	lb.	.07 @	.07½
Chinese, yellow, bags	lb.	.05 @	.05½
Dutch, yellow, bags	lb.	.07¾@	.08¼
English, yellow, bags	lb.	.07¾@	.08¼
German, bags	lb.	.07½@	.08
Roumanian, yellow, bags	lb.	.07 @	.07½
Sicilian, brown, bags	lb.	.07½@	.08
Myrobalans, J1, ship't, bags	ton.	25.00	@26.00
J2, shipment, bags	ton.	14.75	@ —
R2, shipment, bags	ton.	14.50	@ —
Extract, liquid, 25 p.c., bbls	lb.	.03¾@	.04¼

N

Naphtha, painters' (see Petroleum thinner and V.M.P. naphtha).			
solvent (see S).			
Naphthalene, crude, domestic, 74 to 76 p.c., bags.	100 lbs.	1.65 @	2.25
imported, c.i.f. bags.	100 lbs.	2.50 @	—
dyestuffs, bags	lb.	.04½@	.06
refined, balls, spot, barrels	lb.	.05½@	.06½
contract, car lots, barrels	lb.	.04¾@	—
flake, spot, barrels	lb.	.05½@	.06½
contract, car lots, barrels	lb.	.04¾@	—
Nerolin, crystals, cans	lb.	1.40 @	1.50
Nickel chloride, barrels	lb.	.17 @	.19
kegs	lb.	.20 @	.24
Oxide, barrels	lb.	.35 @	.38
Salt, double, barrels	lb.	.11 @	—
single, barrels	lb.	.11 @	—
contracts, 1932, single or double salt, barrels	lb.	.11 @	—
Nicotine, 50 p.c., tins	8 lbs.	8.25 @	10.15
Sulphate, 55-lb. drums	lb.	.74½@	.86
10-lb. tins	lb.	.82½@	1.01½
5-lb. tins	lb.	.94 @	1.17
Niter cake, works, bulk	ton.	10.00	@12.00
barrels	ton.	22.00	@24.00
Nitrobenzene, double distilled, tanks	lb.	.08¼@	—
car lots, drums	lb.	.09 @	—
less car lots, drums	lb.	.11 @	—
Nitrocellulose, 4 and 8 sec., car lots, works, barrels	lb.	.27 @	—
less car lots, works, barrels	lb.	.28 @	.29
15 to 20 up to 300 sec., car lots, works, barrels	lb.	.27 @	—
less car lots, works, barrels	lb.	.28 @	.29
AS, ½ sec., car lots, works, barrels	lb.	.29 @	—
less car lots, works, barrels	lb.	.30 @	.31
15 to 20 and 30 to 40 sec., car lots, works, barrels	lb.	.29 @	—
less car lots, works, barrels	lb.	.30 @	.31
Bronzing, 40 and 70 sec., car lots, works, barrels	lb.	.31½@	—
less car lots, works, barrels	lb.	.32 @	.33
Nitrocellulose, RS, ¼ sec., car lots, works, barrels	lb.	.27½@	—
less car lots, works, barrels	lb.	.28 @	.29
½ sec., car lots, works, barrels	lb.	.27½@	—
less car lots, works, barrels	lb.	.28½@	.29
(Nitrocellulose prices are quoted on the basis of dry weight; denatured alcohol used in manufacture is charged extra; barrels to be paid for extra, but returnable.)			
Nitrogenous fertilizer material, 8-10 p.c. ammonia, bags, imported, c.i.f. Atlantic ports	unit-ton.	1.50 @	1.60
domestic, f.o.b. sellers' works, East Coast	unit-ton.	1.70 @	1.75
f.o.b. western works	unit-ton.	1.00 @	—
Nitronaphthalene, barrels	lb.	.24 @	.25
Nitrotoluene, works, drums	lb.	.17 @	.18
Nutgalls, Aleppo, bags	lb.	.18 @	—
Chinese, shipment, cases	lb.	.17 @	—
Extract (see Gall extract.)			
Nutmegs, 80s, bags, cases	lb.	.12½@	.13
110's, bags, cases	lb.	.11 @	.11½
West India, bags, cases	lb.	.06 @	.06¼
Nux vomica, bales	lb.	.05 @	.06
powdered, barrels, boxes	lb.	.07½@	.08

O

Oakbark extract, 25 p.c. tannin, barrels	lb.	.03¾@	.03½
Ocher (see Yellow).			
Octanes, 100-140 deg. C. mixed, group 3, tankcars	gal.	.11 @	—
car lots, drums	gal.	.13 @	—
Oil:—			
Almond, bitter, artificial (see Benzaldehyde).			
natural, bottles	lb.	2.00 @	2.50
s.p.a., bottles	lb.	1.85 @	2.25
sweet, true (expressed), cans, cases	lb.	.45 @	.48
Amyris, tins	lb.	1.90 @	2.00
Angelica root, bottles	lb.	19.00	@20.00
Anilin (see A).			
Anise, lead free, U.S.P., tins	lb.	.30 @	.35
Apricot, kernel, drums, cans	lb.	.20 @	.22
Bay, West Indian, tins	lb.	1.30 @	1.80
Bergamot, artificial, cans	lb.	1.00 @	1.10
natural, Messina, coppers	lb.	1.20 @	2.00
Betula (see Oil, sweet birch).			
Birch (See Oil, sweet birch).			
Birch tar, crude, tins	lb.	.12 @	.13
rectified, tins	lb.	.45 @	.50
Bois de rose, Brazilian, tins	lb.	.90 @	1.00
Cayenne, tins	lb.	1.90 @	2.10
Cade, U.S.P., tins	lb.	.24 @	.28
Cajeput, technical, drums	lb.	.48 @	.50
U.S.P., IX, tins	lb.	.50 @	.60
U.S.P., X, tins	lb.	.65 @	.70
Calamus, tins	lb.	2.75 @	3.25
Camphor, sassafrassy, drums	lb.	.12 @	—
cans	lb.	.14 @	—
white, drums	lb.	.12 @	—
cans	lb.	.15 @	—
Cananga, native, tins	lb.	1.50 @	1.75
rectified, tins	lb.	2.05 @	2.25
Capsicum (oleoresin), U.S.P., VIII, cans	lb.	1.90 @	2.15
Caraway, U.S.P., tins	lb.	1.40 @	1.50
Cardamom, seed, bottles	lb.	11.00	@24.00
Cassia, redistilled, U.S.P., cans	lb.	.80 @	.85
Castor, blown, less car lots, drums	lb.	.11¼@	.11¾
medicinal, car lots, bbls	lb.	.09¼@	—
drums, returnable	lb.	.09 @	—
less car lots, barrels	lb.	.10 @	—
cases	lb.	.11 @	.13
drums, returnable	lb.	.09¾@	—
tanks	lb.	.08½@	—
No. 3, car lots, barrels	lb.	.08¾@	—
drums, returnable	lb.	.08½@	—
less car lots, barrels	lb.	.09½@	—
drums, returnable	lb.	.09¼@	—
tanks	lb.	.08 @	—
sulphonated, 50 p.c. (43 p.c. fat), car lots, drums	lb.	.07½@	—
less car lots, drums	lb.	.08 @	—
75 p.c. (63 p.c. fat), car lots, drums	lb.	.09½@	—
less car lots, drums	lb.	.10 @	—
80 p.c. (68 p.c. fat), car lots, drums	lb.	.11 @	—
less car lots, drums	lb.	.11½@	—
Cedarleaf, drums	lb.	.52 @	.55
tins	lb.	.56 @	.75
Cedarwood, drums, tins	lb.	.24 @	.31
Celery seed, bottles	lb.	7.50 @	9.75
Chaulmoogra, 500-lb. lots, cans	lb.	1.20 @	—
25-lb. lots, cans	lb.	1.45 @	—
Chinawood, barrels, drums	lb.	.04¾@	.05
tanks	lb.	.04¾@	.04½
Coast, spot, tanks	lb.	.04 @	.04½
futures	lb.	.04 @	.04¼
Cinnamon, Ceylon, bottles	lb.	7.00	@11.50
Citronella, Ceylon, cans	lb.	.35 @	.39
drums	lb.	.33 @	.37
Java, drums	lb.	.43 @	.45
Clove, U.S.P., cans	lb.	.65 @	.70
Coconut, Ceylon grade, barrels	lb.	.04¼@	.04½
Coast, tanks	lb.	.02¾@	.02¾
Cochin grade, barrels	lb.	.04¾	Nom.
Manila, barrels	lb.	.04¼@	.04½
bulk, shipments, c.i.f.	lb.	.02⅞	Nom.
tanks	lb.	.03 @	.03⅛
Coast, tanks	lb.	.02⅝@	.02⅝
Cod, British, East Coast, barrels	gal.	.21 @	.24
Japanese, drums	gal.	.26 @	—
Newfoundland, tanked, barrels	gal.	.21 @	.22
Norwegian, barrels	lb.	.19 @	.21
Codliver, Norwegian	bbl.	18.50	@21.00
Coriander seed, bottles	lb.	3.50 @	4.35
Corn, crude, barrels	lb.	.05½@	.05¾
works, tanks	lb.	.03¼@	.03¼
refined, barrels	lb.	.06½@	.06¾
Cottonseed (see daily records in market report).			
Creosote (see C)			
Croton, U.S.P., tins	lb.	2.10 @	2.60
Cubeb, U.S.P., tins	lb.	2.45 @	2.85
Crude (see Petroleum, crude)			
Cumin, bottles	lb.	7.00 @	7.25
Degras (see D)			
Diesel Bayonne, bulk	bbl.	1.65 @	—
California, 27 plus	bbl.	.76 @	.85
Dip (see D).			
Dill, from seed, bottles	lb.	2.90 @	3.60
from weed, bottles	lb.	5.25 @	5.30
Erigeron, tins	lb.	1.00 @	1.40
Eucalyptus, Australia, cases	lb.	.21 @	.23
drums	lb.	.19 @	.21
Fennel seed, sweet, tins	lb.	.95 @	1.00
Fuel, California tidewater, bunker	bbl.	.60 @	.70
Gulf coast	bbl.	.60 @	—
Kansas, 24-26	bbl.	.45 @	.50
Louisiana-Arkansas, 16-20	bbl.	.35 @	.40
18-20	bbl.	.40 @	.45
New York and New Jersey terminals:—			
Monday	bbl.	.75 @	—
Tuesday	bbl.	.75 @	—
Wednesday	bbl.	.75 @	—
Thursday	bbl.	.75 @	—
Friday	bbl.	.75 @	—
Saturday	bbl.	.75 @	—
North Texas, 24-26	bbl.	.40 @	.45
26-30	bbl.	.42½@	.47½
Oil, fuel, Oklahoma, 14-16	bbl.	.22½@	.25
18-22	bbl.	.27½@	.30
22-26	bbl.	.30 @	.35
24-26	bbl.	.35 @	.40
26-30	bbl.	.45 @	.50
28-30	bbl.	.65 @	.70
Pennsylvania, 30-34	gal.	.03 @	.03½
36-40	gal.	.03¼@	.03¼
Furnace, bulk, Bayonne	gal.	.04 @	.05
Kansas, 38-40	gal.	.02¼@	.02½
Louisiana - Arkansas, 36-40 light straw	gal.	.02¾@	.03
Oklahoma, 35-37	gal.	.01¾@	.02
36-38	gal.	.01¾@	.02
38-40	gal.	.01⅞@	.02½
Fusel (see F).			
Gas, Bayonne, 32-36, bulk	gal.	.04 @	—
Gulf Coast, 32-36	gal.	.02 @	—
Kansas, 32-36	gal.	.01½@	.01¾
Louisiana-Arkansas, 32-36	gal.	.01¾@	.02
North Texas, 32-36	gal.	.01½@	.01¼
Oklahoma, 32-36	gal.	.01¼@	.01⅝
Gaultheria (see Oil, wintergreen leaf).			
Geranium, Algerian, rose, tins	lb.	4.00 @	5.85
Bourbon, tins	lb.	4.25 @	4.75
Turkish, tins	lb.	1.65 @	1.70
Ginger, distilled, bottles	lb.	3.25 @	3.40
Haarlem, domestic, bottles, gross	gross	3.25 @	3.30
imported, bottles	gross	3.35 @	3.40
Hemlock, tins	lb.	.65 @	.75
Herring, coast, tanks	gal.	.12	Nom.
Juniper berry, U.S.P., tins	lb.	1.10 @	3.00
Lard, technical, tins	lb.	.45 @	.60
Lard, common, No. 1, barrels, 100 lbs.	100 lbs.	6.50 @	—
No. 2, barrels	100 lbs.	6.25 @	—
extra, barrels	100 lbs.	7.00 @	—
No. 1, barrels	100 lbs.	6.75 @	—
prime, barrels	100 lbs.	8.87½@	—
winter, strained, barrels, 100 lbs.	100 lbs.	7.25 @	—
Lavender, flowers, French, U.S.P., tins	lb.	1.30 @	3.50
garden, tins	lb.	.45 @	.50
Spike, French, technical, tins	lb.	.57 @	.60
Spanish, technical, tins	lb.	.48 @	.50
Lemon, California, cans	lb.	.65 @	—
clarified, cans	lb.	.70 @	—
Messina, coppers, tins	lb.	.90 @	1.30
Lemongrass, native, drums, tins	lb.	.40 @	.55
Lime, distilled, tins	lb.	6.50 @	7.00
expressed, tins	lb.	9.00 @	13.00
Linaloe wood, cases	lb.	1.15 @	1.50
Linseed, boiled, tanks	lb.	.0740@	—
car lots, barrels	lb.	.0806@	—
less car lots, barrels	lb.	.0840@	—
less than 5 barrels	lb.	.0880@	—
double boiled, less than 5 barrels	lb.	.0910@	.0930
raw tanks	lb.	.0706@	—
car lots, barrels	lb.	.0760@	—
less than car lots, barrels,	lb.	.0806@	—
less than 5 barrels	lb.	.0840@	—
refined, barrels	lb.	.0830@	.0870
varnish grade, barrels	lb.	.0850@	.0890
Lubricating, including tax, spot, car lots, barrels, bright stock, light	gal.	.30 @	.31
cylinder, light, filtered	gal.	.27 @	.28
D 600	gal.	.27 @	.28
Warren, E 600	gal.	.24½@	.25
unfiltered, 600 s.r.	gal.	.22 @	.22¼
650 s. r.	gal.	.22 @	.23
630 flash, s. r.	gal.	.30 @	.31
600 flash, s. r.	gal.	.26 @	.27
California, pale or red, at refinery tankcars:—			
Up to 100 vis., inclusive	gal.	.14 @	.14½
140-150 vis.	gal.	.14 @	.14½
215 vis.	gal.	.16½@	.17
300 vis.	gal.	.17 @	.17½
350 vis.	gal.	.17¾@	.17⅞
410 vis.	gal.	.17½@	.18
450 vis.	gal.	.17⅞@	.18¼
500 vis.	gal.	.18 @	.18½
600 vis.	gal.	.18¼@	.18⅝
700 vis.	gal.	.18½@	.19
900 vis.	gal.	.19½@	—
1,000 vis.	gal.	.19¼@	.19⅝
1,200 vis.	gal.	.21½@	—
80 vis. at 210 deg. F.	gal.	.21½@	—
95 vis. at 210 deg. F.	gal.	.21½@	—
115 vis. at 210 deg. F.	gal.	.21½@	—
Oklahoma, 100 vis., No. 2 color	gal.	.08½@	.08¾
100 vis., No. 3 color	gal.	.08½@	.08⅝
150 vis., No. 3 color	gal.	.10¼@	.10½
150 vis., No. 4 color	gal.	.10 @	.10¼
180 vis., No. 3 color	gal.	.11½@	.11¾
180 vis., No. 4 color	gal.	.11¼@	.11½
180 vis., No. 5 color	gal.	.11 @	.11¼
200 vis., No. 3 color	gal.	.12¼@	.12½
200 vis., No. 4 color	gal.	.12 @	.12½
200 vis., No. 5 color	gal.	.11¾@	.12
220 vis., No. 3 color	gal.	.13 @	.13½
220 vis., No. 4 color	gal.	.12 @	.12½
220 vis., No. 5 color	agl.	.11¾@	.12
240 vis., No. 3 color	gal.	.11¾@	.11⅞
240 vis., No. 4 color	gal.	.13½@	.14
240 vis., No. 5 color	gal.	.13 @	.13½
280 vis., No. 3 color	gal.	.16 @	.16½
280 vis., No. 4 color	gal.	.15 @	.15½
280 vis., No. 5½ color	gal.	.13⅝@	.14
Pennsylvania, 150 vis., No. 3 color	gal.	.11½@	.12
180 vis., No. 3 color	gal.	.14½@	.15
200 vis., No. 3 color	gal.	.16 @	.17
600 fire steam ref. cyl. stock	gal.	.11½@	.12
635 fire steam ref. cyl. stock	gal.	.13 @	.13½
650 fire steam ref. cyl. stock	gal.	.14 @	.14½
600 flash, cyl. stock	gal.	.15 @	.15½
630 flash, cyl. stock	gal.	.20½@	.21
600 E amber fil. cyl. stock	gal.	.16 @	.16½
600 cold test (light bright)	gal.	.19½@	.20
40 pour	gal.	.19½@	.20
25 to 35 pour	gal.	.19½@	.20
10 to 25 pour	gal.	.19¼@	.20
10 to 15 pour	gal.	.22 @	.23
Mace, distilled, tins	lb.	.75 @	.90
Menhaden, crude, f.o.b. Baltimore, tanks	gal.	.10½	Nom.
refined, alkali, barrels	lb.	.0515@	.0575
tanks	lb.	.0475@	—
light, pressed, bbls	lb.	.0390@	.0450
tanks	lb.	.0350@	—
Mustard, artificial, U.S.P., bottles	lb.	1.40 @	1.50
natural, U.S.P., bottles	lb.	8.00 @	8.50
expressed, barrels	gal.	.40 @	.46
Neatsfoot, cold pressed, barrels, 100 lbs.	100 lbs.	13.00 @	—
extra, barrels	100 lbs.	7.00 @	—
No. 1, barrels	100 lbs.	6.75 @	—
pure, barrels	100 lbs.	10.00 @	—
Neroli, bottles	lb.	35.00	@90.00
Nutmeg, U.S.P., tins	lb.	.75 @	.90
Olive, denatured, barrels	gal.	.58 @	.60
edible, barrels	gal.	1.30 @	1.40
foots, barrels	lb.	.04¾@	.04¾
sulphonated, 50 p.c. (43 p.c. fat), car lots, drums	lb.	.08¼@	—
less car lots, drums	lb.	.08¾@	—
75 p.c. (63 p.c. fat), car lots, drums	lb.	.11¼@	—
less car lots, drums	lb.	.12¼@	—
80 p.c. (68 p.c. fat), car lots, drums	lb.	.12¼@	—
less car lots, drums	lb.	.13 @	—
Oleo, No. 1, barrels	100 lbs.	6.12½@

Oil, orange, sweet, distilled, tins.	lb.	.40 @	.45
expressed, African, drums.	lb.	.66 @	.70
California, tins.	lb.	.70 @	—
Messina U.S.P., coppers.	lb.	.90 @	1.60
West India, tins.	lb.	1.10 @	1.15
Origanum, commercial, tins.	lb.	.25 @	.50
Palm, Lagos, casks.	lb.	.03 @	—
shipments, casks.	lb.	.02⅝@	.02¾
Niger, casks.	lb.	.02⅝@	.02¾
shipment, casks.	lb.	.0240@	.0250
Palm kernel, denatured, drums.	lb.	.04½	Nom.
Palmarosa, tins.	lb.	1.65 @	1.70
Patchouli, bottles.	lb.	2.75 @	3.50
Peanut, crude, barrels.	lb.	.06½	Nom.
mill, tanks.	lb.	.03	Nom.
refined, edible, barrels.	lb.	.08 @	.11
Pennyroyal, domestic, tins.	lb.	1.65 @	1.75
imported, tins.	lb.	1.15 @	1.35
Peppermint, natural, cases.	lb.	1.70 @	1.85
redistilled, U.S.P., tins.	lb.	1.95 @	2.00
Perilla, drums.	lb.	.05 @	.05½
tanks, Coast.	lb.	.04½@	—
Petitgrain, Paraguay, tins.	lb.	.87 @	1.00
Pimento, tins.	lb.	1.05 @	2.00
Pine, steam distilled, straw color, barrels.	gal.	.59 @	.60
water-white, barrels.	gal.	.64 @	.65
Pine needle, Siberian, cans.	lb.	.58 @	.70
Poppyseed, barrels.	gal.	1.55 @	—
Rapeseed, blown, barrels.	gal.	.56 @	.58
refined, denatured, bbls.	gal.	.37	Nom.
Red, distilled or saponified			
barrels	lb.	.06 @	.06⅝
drums	lb.	.05¾@	.06
tanks	lb.	.05 @	—
white, barrels.	lb.	.10¼@	.10¾
imported, barrels.	gal.	1.05 @	1.50
Turkey (see Oil, turkey red).			
Rose, artificial, bottles.	oz.	2.00 @	3.00
natural, coppers.	oz.	5.50 @	18.00
Rosemary, technical, tins.	lb.	.22 @	.27
U.S.P., tins.	lb.	.26½@	.30¼
Rosin, first rectified, drums.	gal.	.38 @	.42
second rectified, drums.	gal.	.43 @	.46
third rectified, drums.	gal.	.47 @	.49
Salmon, coast, tanks.	gal.	.11½@	—
Sandalwood, Australian, tins.	lb.	4.50 @	5.50
East India, U.S.P., makers, tins.		4.75 @	5.75
Sardine, Coast, tanks.	gal.	.12 @	.15
for poultry feeding, coast, drums.	gal.	.45 @	.50
Sassafras, artificial, drums.	lb.	.17½@	—
cans	lb.	.19½@	—
natural, drums, tins.	lb.	.50 @	1.00
Savin, tins.	lb.	1.65 @	2.00
Sesame, ref., white, drums.	lb.	.09½@	.10
yellow, drums.	lb.	.09 @	.09½
Soybean, domestic, crude, barrels.	lb.	.0460@	.0500
tanks	lb.	.0400@	—
refined, barrels.	lb.	.0500@	.0540
tanks	lb.	.0440@	—
Spearmint, U.S.P., cases.	lb.	.95 @	1.00
Sperm, bleached, 38 deg., drums,	lb.	.0880@	.0900
45 deg., drums.	lb.	.0810@	.0830
natural, drums.	lb.	.0760@	.0780
Spruce, tins.	lb.	.65 @	.75
Sweet birch, Northern, tins.	lb.	1.90 @	3.00
Southern, tins.	lb.	1.30 @	1.65
Tallow, acidless, bbls. 100 lbs.		6.00 @	—
tanks 100 lbs.		5.30 @	—
Tansy, tins.	lb.	1.50 @	1.90
Tar, commercial, barrels.	gal.	.17 @	.19
Tar acid (see T).			
Teaseed, coast, barrels.	lb.	.05½	Nom.
Thyme, N.F.V., red, drums, tins.	lb.	.50 @	.75
white, tins.	lb.	.62½@	.90
Tung (see Oil, chinawood).			
Turkey, red, 50 p.c., barrels, drums.	lb.	.06¼@	.07½
75 p.c., barrels, drums.	lb.	.08 @	.09
Turpentine (see T).			
Turtle, cans.	gal.	4.00 @	5.00
Vetiver, Bourbon, bottles.	lb.	4.00 @	4.25
Walnut, crude, barrels.	lb.	.09	Nom.
refined, barrels.	lb.	.12	Nom.
Whale, crude, No. 1, coast, tanks.	lb.	.04	Nom.
No. 2 coast, tanks.	lb.	.03½	Nom.
refined, natural, drums.	lb.	.0580@	.0600
winter, bleached, drums.	lb.	.0620@	.0640
White, mineral, domestic, 865@870 s.g., 125-135 vis., drums.	gal.	.70½@	.75½
875@885 s.g., 175-185 vis., drums.	gal.	.78 @	.83
890@900 s.g., 330-350 vis., drums.	gal.	.83 @	.88
Russian, 860@865 s.g., 75-80 vis., drums.	gal.	.58 @	.63
870@875 s.g., 145-150 vis., drums.	gal.	.73 @	.78
875@880 s.g., 185-190 vis., drums.	gal.	.78 @	.83
880@885 s.g., 285-295 vis., drums.	gal.	.81 @	.86
885@890 s.g., 325@330 vis., drums.	gal.	.83 @	.88
Wintergreen, Northern, tins.	lb.	4.00 @	8.00
Southern, tins.	lb.	2.65 @	3.75
synthetic (see Methylsalicylate).			
Wood (see Oil, chinawood).			
Wormseed, tins.	lb.	1.65 @	1.85
Wormwood, tins.	lb.	2.00 @	2.25
Ylang ylang, Bourbon, bottles, cans.	lb.	3.50 @	5.25
Manila, bottles.	lb.	26.00 @	30.00
Opium, U.S.P., cases.	lb.	11.90 @	12.90
granulated, U.S.P., cans.	lb.	12.85 @	13.85
powdered, U.S.P., cans.	lb.	12.85 @	13.85
Orange mineral, American ex-			
white lead, casks.	lb.	.10¼@	—
ex-red lead, casks.	lb.	.09¼@	—
French, Tours, casks.	lb.	.15½@	—
kegs	lb.	.16¼@	—
Orange peel, bitter, bales.	lb.	.07½@	.08
sweet, bales.	lb.	.06½@	.07
Orange flower petals, cases.	lb.	.22 @	.23
Orris root, Florentine, bags.	lb.	.08½@	.09
fingers, cases.	lb.	.90 @	.95
powdered, barrels, boxes.	lb.	.11 @	.12
Verona, bales.	lb.	.07½@	.08
powdered, bales.	lb.	.10 @	.11
Orthochloranilin, drums.	lb.	.65 @	.75
Orthoanisidin, barrels.	lb.	.84 @	—
Orthoanisidin, barrels.	lb.	1.00 @	1.25
Orthochlorophenol, drums.	lb.	.50 @	.65
Orthocresol, drums.	lb.	.13 @	.15
Orthodichlorobenzene, drums.	lb.	.05½@	.06
Orthonitrochlorobenzene, kegs.	lb.	.28 @	.29
Orthonitroparachlorophenol, tins.	lb.	.70 @	.75
Orthonitrophenol, kegs.	lb.	.85 @	.90
Orthonitrotoluene, drums.	lb	.05½@	.06
Orthotoluenesulphonate, kegs.	lb	2.00 @	2.05
Orthotoluidin, drums.	lb	.14½@	.15
Osage orange extract, liquid, 51 deg., barrels.	lb.	.07 @	.07½

P

Papain, powdered, cases.	lb.	1.30 @	1.60
Paprika, extra fancy, cases.	lb.	.22½@	.23
fair, bags.	lb.	.18½@	.19
fancy, bags.	lb.	.21½@	.22
medium, bags.	lb.	.20½@	.21
Paraaminoacetanilide, kegs.	lb.	.85 @	.88
Para-aminophenol, base, bbls.	lb.	.92 @	.94
hydrochloride, barrels.	lb.	1.40 @	1.50
Parachlorophenol, drums.	lb.	.50 @	.65
Paracoumarone resin, car lots, drums.	lb.	.07 @	.11
Paracymene, refined, drums.	gal.	.70 @	1.12½
Paradichlorobenzene, drums.	lb.	.15 @	—
kegs	lb.	.16 @	.28
Paraffin, crude, white scale, 122@124 A.m.p., bbls.	lb.	.0195@	.02
124@126 A.m.p., bbls.	lb.	.0195@	.02
yellow scale, 124@126 A.m.p., barrels.	lb.	.0190@	.0195
fully refined, slabs, 118@120 A.m.p., bags.	lb.	.03 @	—
123@125 A.m.p., bags.	lb.	.03 @	.0310
export, f.a.s. N. Y., bags	lb.	.0275@	.02⅞
125@127 A.m.p., bags.	lb.	.0320@	.0330
export, f.a.s. N. Y., bags	lb.	.0275@	.02⅞
128@130 A.m.p., bags.	lb.	.0340@	.0355
export, f.a.s. N. Y., bags	lb.	.03 @	.03¼
130@132 A.m.p., bags.	lb.	.0360@	.0370
export, f.a.s. N. Y., bags	lb.	.03¼@	.03¼
133@135 A.m.p., bags.	lb.	.0420@	.0430
export, f.a.s. N. Y., bags	lb.	.04 @	.04½
135@137 A.m.p., bags.	lb.	.0445@	.0455
export, f.a.s. N. Y., bags	lb.	.04½@	.04¼
cases ½c. per pound higher than bags.			
match, 105@108 A.m.p., bbls.,	lb.	.02⅞@	.03¼
111@115 A.m.p., bbls.	lb.	.02¼@	.03½
semi-refined, solid, bags, 122 @124 A.m.p., bags.	lb.	.02¼@	.02⅝
Oklahoma, at refinery, crude, scale, 122@124, bags.	lb.	.01¾@	.02
124@126, bags.	lb.	.01¾@	.02¼
Paraformaldehyde, 1,000-lb. lots, kegs.	lb.	.38 @	—
100-lb. lots, kegs.	lb.	.39 @	—
Paraldehyde, technical, drums.	lb.	.20½@	.23
U.S.P., carboys.	lb.	.37 @	.45
Paranitroacetanilide, kegs.	lb.	.45 @	.48
Paranitroanilin, kegs.	lb.	.51 @	—
contract, kegs.	lb.	.48 @	—
Paranitrochlorobenzene, kegs.	lb.	.23½@	.24
Paranitrophenol, kegs.	lb.	.46 @	.47
Paranitrotoluene, kegs.	lb.	.36 @	.37
Paraphenylenediamine, bbls.	lb.	1.25 @	1.30
Paratolueneculphonamide, bbls.	lb.	.70 @	.75
Paratoluenesulphonanilide, barrels.	lb.	.55 @	—
Paratoluidin, barrels.	lb.	.58 @	.60
Pareira brava root, bales.	lb.	.15 @	.16
Paris green, bulk.	lb.	.22½@	.37½
Passion flower herb, bales.	lb.	.04½@	.05
Patchouli leaves, bales.	lb.	.15 @	.16
Pellitory root, bales.	lb.	.13 @	.15
Pennyroyal, bales.	lb.	.08 @	.09
Pentane, normal, 28-38C deg., group 3, tankcars.	gal	.07 @	—
drums, car lots.	gal.	.09 @	—
drums, l.c.l.	gal.	.13 @	—
laboratory grade, group 3, drums, car lots.	gal.	.17 @	—
Pepper, black, Alleppey, bags.	lb.	.07¼@	.07½
Lampong, bags.	lb.	.06½@	.06¾
Tellicherry, bags.	lb.	.08½@	.08¾
Red, chillies, Japanese, No. 1, new crop, bags.	lb.	.14 @	.14½
Birdseye, bags.	lb.	.23 @	.24
Mombassa, bags.	lb.	.15¼@	.15½
white, Java, Muntok, bags.	lb.	.08¾@	.09
Singapore, Muntok, bags.	lb.	.08¾@	.09
Peppermint leaves, bales.	lb.	.18 @	.28
Persian berry extract, barrels.	lb.	.25	Nom.
Peru balsam, drums.	lb.	.85 @	.90
Petrolatum, amber, dark, car lots, barrels.	lb.	.02 @	.02⅝
light, car lots, barrels.	lb.	.02⅝@	.02½
medium, car lots, barrels.	lb.	.02¼@	.02½
cream, car lots, barrels.	lb.	.04½@	.04¾
dark, green, car lots, barrels.	lb.	.01¾@	—
lily white, car lots, barrels.	lb.	.05½@	.05¾
red, car lots, barrels.	lb.	.01¾@	—
snow white, car lots, barrels.	lb.	.06½@	.06¾
veterinary, car lots, barrels.	lb.	.02¼@	.02¼

Petroleum, crude, at wells:—

California:—			
Alamitos Heights	bbl.	.55 @	.84
Athens	bbl.	.65 @	.86
Buena Vista Hills	bbl.	.49 @	.87
Coalinga	bbl.	.49 @	.59
Coyote Hills	bbl.	.55 @	.88
Dominguez	bbl.	.65 @	.86
Elk Hills	bbl.	.49 @	.87
Elwood Terrace, f.o.b. ship.	bbl.	.83 @	.91
Huntington Beach	bbl.	.55 @	.83
Inglewood	bbl.	.55 @	.75
Kern River	bbl.	.49 @	—
Kettleman Hills	bbls.	.66 @	.78
La Habra	bbl.	.55 @	.71
Lost Hills	bbl.	.49 @	.75
McKittrick	bbl.	.49 @	—
Midway	bbl.	.49 @	.87
Montebello	bbl.	.55 @	.68
Newhall	bbl.	.49 @	—
Olinda Brea	bbl.	.55 @	.81
Playa del Rey	bbl.	.55 @	.77
Richfield	bbl.	.55 @	.84
Rosecrans	bbl.	.65 @	.86
Santa Fe Springs	bbl.	.57 @	.96
Seal Beach	bbl.	.55 @	.84
Signal Hill	bbl.	.55 @	.81
Sunset	bbl.	.49 @	.87
Torrance	bbl.	.55 @	.73
Wheeler Ridge	bbl.	.49 @	.58
Whittier	bbl.	.55 @	.71
Canada:—			
Oil Springs	bbl.	1.75 @	—
Petrolia	bbl.	1.82 @	—
East Texas:—			
Gregg County	bbl.	.50 @	—
Rusk County	bbl.	.50 @	—
Smith County	bbl.	.50 @	—
Upshur County	bbl.	.50 @	—
Gulf Coast:—			
Barber's Hill	bbl.	.58 @	.91
Batson	bbl.	.58 @	.91
Conroe	bbl.	.54 @	.74
Dayton	bbl.	.58 @	.91
Evangeline	bbl.	.65 @	.91
*Goose Creek	bbl.	.32 @	.62
High Island	bbl.	.80 @	1.00
*Hull	bbl.	.32 @	.62
*Humble	bbl.	.32 @	.62
Jennings	bbl.	.65 @	.91
Laredo	bbl.	.65 @	.91
*Liberty	bbl.	.32 @	.62
Markham	bbl.	.80 @	1.00
Pettus	bbl.	.55 @	—
Piedras Pintas	bbl.	.60 @	1.10
Refugio, light	bbl.	.32 @	.62
heavy	bbl.	.65 @	—
*Saratoga	bbl.	.58 @	.91
*Sour Lake	bbl.	.32 @	.62
*Spindle Top	bbl.	.32 @	.62
*Terry	bbl.	.58 @	.91

* Grade B crude. Posted price for grade A oil, 32c. per barrel.

Indiana, Illinois:—			
Illinois	bbl.	.62 @	—
Indiana	bbl.	.40 @	—
Midland (Mich.)	bbl.	.95 @	—
Princeton	bbl.	.62 @	—
Kentucky, Tennessee:—			
Somerset	bbl.	.45 @	.60

Petroleum, crude, at wells:—

Louisiana, Arkansas:—			
Bull Bayou	bbl.	.20 @	.44
Caddo	bbl.	.20 @	.52
Cameron Meadows	bbl.	.22 @	.52
Cotton Valley	bbl.	.20 @	.52
De Soto	bbl.	.25 @	.49
El Dorado	bbl.	.25 @	.49
Haynesville	bbl.	.19 @	.52
Homer	bbl.	.28 @	.52
Iowa	bbl.	.32 @	.62
Lockport	bbl.	.32 @	.62
Pine Island	bbl.	.20 @	.44
Smackover	bbl.	.20 @	.30
Stephens	bbl.	.61 @	.64
Urania	bbl.	.25 @	—
Mexico:—			
(F.o.b. terminals, Mexican ports—based on contract.)			
Panuco	bbl.	.45 @	—
Tax, per barrel, 10.127c.			
Tuxpan	bbl.	.93 @	—
Tax, per barrel, 16.809c.			
Midcontinent:—			
Corsicana, heavy	bbl.	.60 @	—
light	bbl.	.20 @	.52
North Texas	bbl.	.28 @	.52
Oklahoma-Kansas	bbl.	.28 @	.52
Pennsylvania, Ohio, West Virginia:—			
Bradford Allegany	bbl.	1.47 @	—
Corning	bbl.	.70 @	—
Lima	bbl.	.70 @	—
Pennsylvania, grade, in Buckeye lines.	bbl.	.97 @	—
Eureka lines.	bbl.	1.12 @	—
New York Transit lines.	bbl.	1.47 @	—
Lower district in National Transit lines.	bbl.	1.42 @	1.47
Southwest Penn lines.	bbl.	1.17 @	—
Wooster	bbl.	.70 @	—
Rocky Mountain:—			
Big Muddy	bbl.	.50 @	—
Cat Creek	bbl.	1.20 @	—
Elk Basin	bbl.	.67 @	—
Grass Creek	bbl.	.87 @	—
Greybull	bbl.	1.20 @	—
Lance Creek	bbl.	.87 @	—
Mule Creek	bbl.	.80 @	—
Pondera	bbl.	.95 @	—
Rock Creek	bbl.	.46 @	—
Salt Creek	bbl.	.76 @	1.00
Sunburst	bbl.	1.05 @	—
South, Central and Southwestern Texas:—			
Darst Creek	bbl.	.35 @	.40
Luling	bbl.	.30 @	—
Lytton Springs	bbl.	.45 @	—
Mirando	bbl.	.55 @	.70
Panola County	bbl.	.20 @	.52
Salt Flat	bbl.	.40 @	—
Texas Panhandle:—			
Carson County	bbl.	.20 @	.41
Gray County	bbl.	.30 @	.46
Hutchinson County	bbl.	.20 @	.41
West Texas:—			
Artesia, N. M.	bbl.	.30 @	—
Crane	bbl.	.30 @	—
Crockett	bbl.	.30 @	—
Ector	bbl.	.30 @	—
Glasscock	bbl.	.30 @	—
Hobbs, N. M.	bbl.	.65 @	—
Hogback, N. M.	bbl.	.80 @	—
Howard	bbl.	.30 @	—
Jackson, N. M.	bbl.	.25 @	—
Lea, N. M.	bbl.	.30 @	—
Maljamar, N. M.	bbl.	.25 @	—
Mitchell	bbl.	.30 @	—
Pecos	bbl.	.30 @	—
Upton	bbl.	.30 @	—
Winkler	bbl.	.30 @	—
Western Kentucky:—			
Oil City, in lines of Stoll Refining Co.	bbl.	1.00 @	—
Western Kentucky, all gravities.	bbl.	.57 @	—
Petroleum, ether, 35-60 deg., Group 3, tankcars.	gal.	.10 @	—
drums, car lots.	gal.	.12 @	—
drums, less car lots.	gal.	.13 @	—
35-60 deg., Group 3, drums,	gal.	.35 @	—
40-75 deg., Group 3, tankcars.	gal.	.11 @	—
drums, car lots.	gal.	.13 @	—
drums, less car lots.	gal.	.14 @	—
laboratory grade, Group 3, drums.	gal.	.17 @	.23
10-gallon drums.	gal.	.50 @	—
Petroleum solvents and diluents—			
Cleaners' naphthas, refinery, Group 3, tankcars.	gal.	.05¼@	.06¼
Bayonne	gal.	.09¼@	—
Pennsylvania	gal.	.07½@	—
tankwagon, Chicago.	gal.	.152 @	—
Des Moines.	gal.	.147 @	—
Milwaukee	gal.	.198 @	—
Minneapolis	gal.	.201 @	—
Newark	gal.	.11 @	.12
New York	gal.	.11 @	—
Omaha	gal.	.16 @	—
St. Louis	gal.	.15 @	—
St. Paul	gal.	.201 @	—
Lacquer diluents, refinery, Bayonne, tankcars.	gal.	.12 @	—
Group 3, tankcars.	gal.	.06½@	.07½
Pennsylvania, tankcars.	gal.	.05¼@	—
Rubber solvent, standard grade, 180 i.b.p., 283 e.p., Group 3, refinery tankcars	gal.	.05¼@	—
light grade, 120 i.b.p., 250	gal.	.05¼@	—
Bayonne	gal.	.08½@	—
Stoddard solvents, 48-50 deg. 320 i.b.p., 400 e.p., group 3, refinery, tankcars.	gal.	.04¾@	.05¼
East Coast, refinery, tankcars.	gal.	.08½@	—
Pennsylvania	gal.	.06 @	—
tankwagon, Chicago.	gal.	.152 @	—
Des Moines.	gal.	.146 @	—
Milwaukee	gal.	.155 @	—
Minneapolis	gal.	.143 @	—
Newark	gal.	.12 @	—
New Orleans.	gal.	.11 @	—
New York.	gal.	.12 @	.13
Omaha	gal.	.134 @	—
Philadelphia	gal.	.14 @	—
St. Louis.	gal.	.131 @	—
St. Paul.	gal.	.143 @	—
Petroleum thinner, 47-49 deg., 415 e.p., refinery, East Coast, tankcars.	gal.	.08½@	—
steel barrels.	gal.	.16 @	—
Group 3, tankcars.	gal.	.04 @	.04½
tankwagon, Chicago.	gal.	.117 @	—
Des Moines.	gal.	.143 @	—
Milwaukee	gal.	.175 @	—
Minneapolis	gal.	.153 @	—
Newark	gal.	.11 @	.13
St. Louis.	gal.	.127 @	—
St. Paul.	gal.	.153 @	—
V. M. & P. Naphtha (see V).			
Phenol, U.S.P., works, car lots, drums.	lb.	.14½@	.15½
less car lots, works, drums.	lb.	.15 @	.16
Phenobarbital	lb.	6.50 @	7.50
Phenolphthalein, U.S.P., 2000 lbs. lots, barrels, drums.	lb.	.50 @	—
100 lb. to 250 lb. lots, barrels, drums, kegs.	lb.	.52 @	—
yellow, barrels.	lb.	.45 @	.47
Phenylacetic aldehyde, bottles.	lb.	3.65 @	8.25
Phenyl chloride, drums.	lb.	.16 @	—
Phenylhydrazin hydrochloride, C.P., works, bottles.	lb.	3.30 @	5.10
commercial, works, kegs.	lb.	3.30 @	6.50
pure, works, bottles.	lb.	2.95 @	3.25
Phosgene, cylinders.	lb.	.70 @	—
Phosphate rock, Florida, high-grade, hard, 77 p.c., mines.	long ton.	6.50 @	—
land pebble, 68 p.c., minimum, mine.	long ton.	3.10 @	3.25
70 p.c., mines.	long ton.	3.75 @	3.90
72 p.c., mines.	long ton.	4.25 @	4.35
75 p.c., basis, 74 p.c. minimum, mines.	long ton.	5.25 @	5.50
75 p.c., minimum, mines,	long ton.	5.50 @	5.75
77 p.c., basis, 76 p.c., minimum, mines.	long-ton.	6.25 @	—
Tennessee, 72 p.c., mines,	long-ton.	5.00 @	—
75 p.c., mines.	long-ton.	5.50 @	—
Phosphorus, red, cases.	lb.	.40 @	.45
yellow, cases.	lb.	.27½@	.32½
Oxychloride, cylinders.	lb.	.18 @	.20
Sesquisulphide, cases.	lb.	.38 @	.43
Trichloride, cylinders.	lb.	.18 @	.20
Phthalic anhydride, drums.	lb.	.15 @	.16
Pichi leaves, bags.	lb.	.08 @	.10
Pilocarpine hydrochloride, bottles, vials.	oz.	1.75 @	1.80
Nitrate, bottles, vials.	oz.	1.75 @	1.80
Pimento, bags.	lb.	.03¾@	.03¾
Pinkroot, true, bales.	lb.	.25 @	.30
Pitch, burgundy (see B).			
hardwood, car lots, one-time container, delivered, Akron.	ton.	24.00	@25.00
f.o.b. works.	ton.	20.00 @	—
pine, barrels.	bbl.	3.50 @	4.00
stearin, drums.	lb.	.03 @	.04¼
Plaster of paris, bags.	ton.	23.00 @	29.00
barrels	100 lbs.	3.40 @	3.50
dentists', barrels.	100 lbs.	3.75 @	—
Pleurisy root, bales.	lb.	.11 @	.12
Podophyllin, U.S.P., tins.	lb.	3.20 @	3.25
Poke root, bales.	lb.	.05 @	.05½
Pomegranate bark, bags.	lb.	.16 @	.17
Root bark, bags.	lb.	.26½@	.27
Poppy flowers, red, bales.	lb.	.35 @	.40
Heads, barrels.	lb.	.35 @	.40
Seed, Dutch, bags.	lb.	.13½@	.14
Hungarian, bags.	lb.	.13½@	.14
Turkish, bags.	lb.	No stocks.	
German, bags.	lb.	No stocks.	
Potash, acetate, U.S.P., barrels, kegs.	lb.	.27 @	.30
Bicarbonate, U.S.P., crystals, barrels.	lb.	.07½@	.09
granular, barrels.	lb.	.10½@	.11
Bichromate, casks.	lb.	.07 @	.08
Binoxalate, drums.	lb.	.16 @	.22
Bisulphate, kegs.	lb.	.16 @	.22
Bromide, barrels.	lb.	.31 @	.32
Carbonate, 98-100 p.c., calcined, shipment, casks.	lb.	.06¾@	.07½
96-98 p.c., calcined, shipment, casks.	lb.	.05¾@	.06¾
80-85 p.c., calcined, casks.	lb.	.04¾@	.05¾
hydrated, shipm't, casks.	lb.	.05½@	.06¾
U.S.P., granular, barrels.	lb.	.13 @	—
powdered, barrels.	lb.	.16 @	—
Caustic, solid, 88-92 p.c., domestic, works, drums.	lb.	.06½@	.06¾
imported, casks.	lb.	.06¼@	.06½
flake, 88-92 p.c., domestic, works, car lots, drums, 100 lbs.		7.05 @	8.00
less car lots, drums.	lb.	.07½@	.08
imported, c/l, drums. 100 lbs.		7.95 @	8.00
liquid, tanks.	lb.	.02¾@	—
drums	lb.	.03½@	.03¾
Chlorate, technical, domestic, works, car lots, casks.	lb.	.08 @	.08½
imported, car lots, casks.	lb.	.07½@	.08
contracts	lb.	.07½@	.08
U.S.P., granular, kegs.	lb.	.15 @	.16
powdered, kegs.	lb.	.10 @	.11
Chloride, crystals, barrels.	lb.	.04 @	.04¾
Chromate, kegs.	lb.	.23 @	.32
Citrate, barrels, kegs.	lb.	.41½@	.45½
Cyanide, cases.	lb.	.50 @	.57½
Glycerophosphate, solution, 75 p.c., 100-pound lots, cans.	lb.	1.25 @	1.30
Guaiacolsulphonate, cans.	lb.	1.65 @	1.70
Hypophosphite, cans.	lb.	.65 @	.70
Iodide, barrels, fiber drums.	lb.	2.00 @	2.05
Kainit*, min. 14 p.c., bulk, shipment.	ton.	9.70 @	—
Manure salt*, domestic, 25 p.c., c.i.f. ports, bulk.	ton.	15.00 @	—
imported, 20 p.c., shipment, bulk.	ton.	12.00 @	—
30 p.c., bulk shipment.	ton.	19.15 @	—
Metabisulphite, barrels.	lb.	.10¼@	.10
Muriate*, imported, 80-85 p.c., min. 80 p.c., bags, shipment.	ton.	37.15 @	—
bulk, shipment.	ton.	35.55 @	—
domestic, 95-98 p.c., min. 95 p.c., bulk.	ton.	40.50 @	—
bags	ton.	42.50 @	—
Nitrate, crude, 95 p.c., c.i.f. ports, bag.	ton.	53.50 @	53.80
Oxalate, pure, crystals, kegs.	lb.	.28 @	.32
technical, barrels.	lb.	.16 @	.20
Perchlorate, works, kegs.	lb.	.09 @	.11
Permanganate, tech., drums.	lb.	.16 @	.16¼
U.S.P., drums.	lb.	.16 @	.16¾
Prussiate, red, barrels.	lb.	.32½@	.34½
yellow, barrels.	lb.	.16½@	.17½
Sulphate, N.F., barrels.	lb	.11 @	.16
technical*, 90-95 p.c., min. 90 p.c., bags, shipment,	ton.	47.50 @	—
Vegetable, f.o.b. Baltimore, bulk.	ton.	19.97 @	—
Xanthate, car lots, drums,	lb.	.14 @	—
tanks	lb.	.12 @	—
Potash-magnesia sulphate*, 48-53 p.c., min. 48 p.c., shipments, bags.	ton.	27.80 @	—
Potash-titanium oxalate, kegs.	lb.	.21 @	.22
Prickly ash bark, bales.	lb.	.10 @	.11
Berries, bales.	lb.	.20 @	.21
Prince's pine herb, bales.	lb.	.12 @	.13
Propane, group 3, tankcar.	gal.	.07 @	—
100-lb. cylinders.	gal.	.40 @	—
Psyllium seed (see Fleaseed).			
Pulsatilla, bales.	lb.	.10 @	.11
Pumice stone, lump, casks.	lb.	.05 @	.07
powdered, pure, barrels.	lb.	.02¼@	.04
Pumpkin seed, bags.	lb.	.09 @	.10
Putty, commercial, tubs.	100 lbs.	2.00 @	2.25
raw linseed oil, kegs.	100 lbs.	3.40 @	3.50
refined, kegs.	100 lbs.	3.75 @	4.00
Pyrethrum flowers, powdered, closed, barrels, kegs.	lb.	.19 @	.20
half closed, barrels, kegs.	lb.	.18 @	.19
open, barrels, kegs.	lb.	.16 @	.17
with stems, barrels, kegs.	lb.	.13 @	.14
Pyridin, denaturing, drums.	gal.	.85 @	.86
refined, 2 deg., drums.	lb.	.40 @	—
Pyrites, Spanish, c.i.f. Atlantic ports, bulk.	ton.	.12 @	.13

* See fertilizer market report for discounts.

Q

Quassia, chips, bales	lb.	.05 @	.07
Quebracho extract, liquid, 35 p.c. tannin, tanks	lb.	.02 @	—
barrels	lb.	.02 @	—
solid, 63 p.c., bags	lb.	.02¾@	—
clarified, 64 p.c., bags	lb.	.02¾@	—
Queen of the meadow, bags	lb.	.06 @	.07
Root, bags	lb.	.06 @	.07
Quercitron extract, liquid, 51 degrees, barrels	lb.	.05¼@	.06½
solid, drums	lb.	.09½@	.10½
Quicksilver, domestic, 76-lbs. net, per flask		54.50	@55.50
Quince seed, bags	lb.	.55 @	1.75
Quinidine alkaloid, crystals, cans	oz.	.57 @	.61
Sulphate, cans	oz.	.40 @	—
Quinine acetate, cans	oz.	.68 @	—
Alkaloid, cans	oz.	.61 @	—
Arsenate, cans	oz.	.71 @	—
Arsenite, cans	oz.	.73 @	—
Benzoate, cans	oz.	— @	—
Bisulphate, cans	oz.	.30 @	—
Citrate, cans	oz.	.46 @	—
Dihydrobromide, bottles	oz.	.50 @	—
Dihydrochloride, bottles	oz.	.49 @	—
Ethylcarbonate, cans	oz.	.46 @	—
Ferrocyanide, cans	oz.	.69 @	—
Formate, cans	oz.	.66 @	—
Glycerophosphate, cans	oz.	.87 @	—
Hydrobromide, cans	oz.	.45 @	—
Hydrochloride, cans	oz.	.47 @	—
Hydrochlorosulphate, cans	oz.	.49 @	—
Hydriodide, cans	oz.	.71 @	—
Hypophosphite, cans	oz.	.65 @	—
Phosphate, cans	oz.	.57 @	—
Salicylate, cans	oz.	.48 @	—
Sulphate, tins	oz.	.30 @	—
Sulphocarbonate, cans	oz.	.64 @	—
Tannate, cans	oz.	.38 @	—
Tartrate, cans	oz.	.69 @	—
Valerate, cans	oz.	.73 @	—
Quinine-urea hydrochloride, cans	oz.	.50 @	—
Quinoline, refined, 2 deg., f.o.b. works, drums	lb.	.55 @	—

R

R Salt, barrels	lb.	.40 @	.42
Rapeseed, Belgian, bags	lb.	.03½@	.04
Dutch, bags	lb.	.04½@	.05
German, bags	lb.	.04 @	.04½
Raspberries, dried, barrels	lb.	.24 @	.25
Red:—			
Amaranth (maroon lake), kegs	lb.	.50 @	1.50
Alizarin, lake, concentrated, kegs	lb.	1.50 @	2.00
Cadmium, ton lots, bbls	lb.	.70 @	—
barrels, kegs	lb.	.75 @	.80
Selenide, kegs	lb.	2.00 @	—
Carmine, No. 40, 11-lb. tins	lb.	3.65 @	3.75
100-lb. lots	lb.	3.25 @	—
Crocus martis, purple oxide, barrels	lb.	.03 @	.05
Rosin, kegs	lb.	.65 @	.75
Indian dry, American, ordinary, barrels	lb.	.04 @	.08
pure, barrels	lb.	.08¾@	.09
car lots, bags	lb.	.03 @	—
English ord., barrels	lb.	.04 @	.08
pure, barrels	lb.	.08¾@	.09
in oil, cans	quart.	1.21 @	1.98
Iron oxide, from copperas, pure, casks	lb.	.08½@	.14
reduced, casks	lb.	.04 @	.06¼
Lake C toner, barrels	lb.	1.30 @	1.35
Lithol toner, kegs	lb.	.80 @	—
Mercury oxide, technical, domestic, barrels	lb.	1.07 @	—
Metallic, Pennsylvania, works, bags, barrels	ton.	38.00	@45.00
Oxide, earth, domestic, barrels	lb.	.02 @	.04½
Persian Gulf, barrels	lb.	.03½@	.04¼
Spanish, barrels	lb.	.01¾@	.03
Para toner, concentrated, 100-lb. lots, kegs	lb.	.80 @	—
reduced, 10 p.c., kegs	lb.	.10 @	.18
Purple, lake, kegs	lb.	.60 @	1.00
toner, kegs	lb.	1.50 @	2.00
Rose pink, barrels	lb.	.15 @	.25
Lake, barrels	lb.	.20 @	.30
Scarlet lake, kegs	lb.	.33 @	.90
Toluidin toner, kegs	lb.	1.35 @	—
Tuscan, barrels	lb.	.15 @	.40
in oil, cans half-pint		.46 @	.65
Venetian, barrels	lb.	.02 @	.04
in oil, cans	gal.	2.16 @	3.94
Vermilion, American, bbls	lb.	.15 @	.25
English, quicksilver, 500-pound lots, kegs, barrels	lb.	1.10 @	1.20
less than 500 pounds, kegs, barrels	lb.	1.15 @	1.30

(Red dyes are listed under Dye.)

Red precipitate, 100-lb. lots, boxes, fiber drums, kegs	dm.	1.24 @	—
Red saunders wood, ground, barrels	lb.	.12 @	.13
Resorcinol, technical, works, cans	lb.	.65 @	—
U.S.P., works, cans, kegs	lb.	1.30 @	1.65
Rhatany root, bags	lb.	.11 @	.12
Rhodinol, bottles	lb.	5.75 @	6.00
Rhubarb, cases, barrels, kegs	lb.	.17 @	.20
powdered, barrels, kegs	lb.	.22 @	.28
Rochelle salt, crystals, powdered, barrels	lb.	.11¼@	—
kegs	lb.	.12 @	—
Rose flowers, red, bales	lb.	.45 @	.50
Water, triple	demijohn.	5.50 @	6.00
Rosemary flowers, bales	lb.	.35 @	.40
Leaves, bales	lb.	.04½@	.04¾
Rosin gum:—			
B, barrels	280 lbs.	3.15 @	—
D, barrels	280 lbs.	3.20 @	—
E, barrels	280 lbs.	3.70 @	—
F, barrels	280 lbs.	3.85 @	—
G, barrels	280 lbs.	3.85 @	—
H, barrels	280 lbs.	3.87½@	—
I, barrels	280 lbs.	3.90 @	—
K, barrels	280 lbs.	4.25 @	—
M, barrels	280 lbs.	4.30 @	—
N, barrels	280 lbs.	4.60 @	—
W. G., barrels	280 lbs.	4.65 @	—
W. W., barrels	280 lbs.	4.80 @	—
X, barrels	280 lbs.	4.85 @	—
wood, barrels	280 lbs.	3.58 @	3.78
works, barrels, car lots,	280 lbs.	2.75 @	—
Rottenstone, domestic, mines	ton.	23.50	@28.00
imported, lump, barrels	lb.	.05 @	.07
powdered, barrels	lb.	.02½@	.04¼
selected, lump, barrels	lb.	.08 @	.10
Rue, bales	lb.	.16 @	.17

S

Sabadilla seed, powdered, barrels,	lb.	.16 @	.17
Saccharin, 1,000-lb. lots, cans	lb.	1.70 @	—
smaller lots, cans	lb.	1.75 @	1.90
Saffron flowers, American, bales,	lb.	.17 @	.18
Spanish, tins	lb.	10.00	@10.25
Safrol, drums, tins	lb.	.20 @	.23
Sage leaves, Dalmatian, bales	lb.	.04¾@	.05
Sage flour, bags	lb.	.02½@	.03¼
Salicin, cans	lb.	6.00 @	6.25
Salol, kegs	lb.	.90 @	.95
Salt (rock soda chloride), car lots, works, bags	ton.	11.40 @	—
less car lots, bags, delivered,	ton.	14.00 @	—
Saltcake, ground, works, barrels	ton.	22.00	@27.00
bulk, works	ton.	13.00	@18.00
imported (c.i.f., barrels	ton.	12.50 @	—
chrome (see Chrome cake).			
Saltpeter, crystals, barrels	lb.	.07¼@	.08½
granular, barrels	lb.	.06 @	.06¾
powder, barrels	lb.	.07 @	.08
Santonin, crystals, cans	lb.	65.00	@70.00
Saponin, tins	lb.	1.15 @	1.25
Sarsaparilla root, Mex., bales	lb.	.12 @	.13
Sassafras bark, ordinary, bales	lb.	.08 @	.09
select, bales	lb.	.12 @	.12½
Savory, bales	lb.	.04 @	.04½
Saw palmetto berries, bags	lb.	.07 @	.08
Scammony root, bags	lb.	.06 @	.06½
Schaeffer's salt, bags	lb.	.48 @	.50
Seidlitz mixture, barrels	lb.	.10 @	—
kegs	lb.	.10¼@	—
Senega root, bales	lb.	.31 @	.32
Senna leaves, Alexandria, bales,	lb.	.07½@	.08
Tinnevelly, No. 1, bales	lb.	.10 @	.11
No. 2, bales	lb.	.07½@	.08
No. 3 bales	lb.	.05½@	.06
powdered, barrels, boxes	lb.	.09 @	.10
Pods, bales	lb.	.07 @	.08
Siftings, bales	lb.	.07 @	.08
Serpentaria root, bales	lb.	.32 @	.33
Shellac, bone dry, one delivery, 10 or more barrels	lb.	.16 @	—
5 to 9 barrels	lb.	.17 @	—
1 to 4 barrels	lb.	.18 @	—
refined, 6c higher in each bracket.			
D.C., V.S.O., and Diamond I. cases	lb.	.17 @	.18
Superfine, bags	lb.	.10 @	.10¾
T. N., bags	lb.	.09 @	.09¾
Shellac varnish, orange, 5-lb. cut, barrels	gal.	.80 @	.85
4½-lb. cut, barrels	gal.	.75 @	.80
4-lb. cut, barrels	gal.	.70 @	.75
white, 5-lb. cut, barrels	gal.	1.05 @	1.10
4½-lb. cut, barrels	gal.	1.00 @	1.10
4-lb. cut, barrels	gal.	.95 @	1.00
Silica, ground extra fine (400 mesh) works, bulk	ton.	30.00	@35.00
fine, works, bulk	ton.	15.00	@20.00
medium fine, works, bulk	ton.	8.00	@12.00
water-floated, works, bulk	ton.	18.00	@22.00
Silver, bullion	oz.	.28½@	—
Nitrate, vials	oz.	.21½@	—
Nucleinate, 480-oz. lots, tins,	oz.	.23¼@	.25¼
Proteinate, 480-oz. lots, tins	oz.	.27 @	—
Simaruba bark, bales	lb.	.23 @	.24
Skatol, bottles	oz.	4.00	@10.00
Skullcap, Eastern, bales	lb.	.25 @	.28
Western, bales	lb.	.14 @	.17
Skunk cabbage root, bales	lb.	.11 @	.12
Smalt, black, extra velvet, barrels	lb.	.05 @	.06
blue, barrels	lb.	.06½@	.07
Snakeroot, Canada, bales	lb.	.15 @	.17
Soapbark, bales	lb.	.07 @	.08
crushed, bales, barrels	lb.	.08 @	.09
cut, bales, barrels	lb.	.05½@	.06
powdered, barrels	lb.	.09 @	.10
Soapstone, powdered, mines, bags, tons		15.00	@22.00
Soda abletate	lb.	.03 @	—
Acetate, anhydrous, drums	lb.	.08¼@	.09
crystal, com'l, barrels	lb.	.04¾@	.05
flake, 60 p.c., drums	lb.	.04¼@	.07
Alginate	lb.	.50 @	—
Antimonate, barrels	lb.	.10½@	—
Arsenate, drums	lb.	.07¾@	.08¾
Arsenite, liquid, drums	gal.	.50 @	.75
Ash, dense, 58 p.c., car lots, works, bags	100 lbs.	1.22½@	—
barrels	100 lbs.	1.43 @	—
bulk	100 lbs.	1.12½@	—
less car lots, bags	100 lbs.	1.96½@	2.11¼
barrels	100 lbs.	2.17 @	2.82
contract, car lots, works, bags	100 lbs.	1.40 @	—
barrels	100 lbs.	1.40½@	—
bulk shipment	100 lbs.	1.10 @	—
extra light, 58 p.c., car lots, works, bags	100 lbs.	1.22½@	—
barrels	100 lbs.	1.58 @	—
less car lots, barrels	100 lbs.	2.29 @	2.44
ex warehouse	100 lbs.	2.29 @	2.44
contracts, car lots, works, bags	100 lbs.	1.20 @	—
barrels	100 lbs.	1.55½@	—
light, 58 p.c., car lots, works, bags	100 lbs.	1.22½@	—
barrels	100 lbs.	1.45½@	—
bulk shipment	100 lbs.	1.07½@	—
paper sacks	100 lbs.	1.20 @	—
less car lots, bags	100 lbs.	1.94 @	2.09
ex warehouse	100 lbs.	2.19 @	—
barrels	100 lbs.	2.17 @	2.82
ex warehouse	100 lbs.	2.07 @	—
contracts, car lots, works, bags	100 lbs.	1.20 @	—
barrels	100 lbs.	1.45 @	—
bulk shipment	100 lbs.	1.05 @	—
paper bags	100 lbs.	1.17½@	—
Benzoate, U.S.P., 50 kegs	lb.	.40 @	—
20 to 49 kegs	lb.	.41 @	—
1 to 19 kegs	lb.	.42 @	—
Bicarbonate, granular, car lots, works, barrels	100 lbs.	2.25 @	2.75
powdered, car lots, works, barrels	100 lbs.	1.85 @	—
kegs	100 lbs.	2.10 @	—
less car lots, barrels	100 lbs.	2.25 @	—
kegs	100 lbs.	2.50 @	—
Bichromate, casks	lb.	.04¼@	.04¾
Bifluoride, barrels	lb.	.12 @	.18
Biphosphate, monobasic, U.S.P., barrels	lb.	.06 @	.07
Bisulphate (see Niter cake).			
Bisulphite, powdered, car lots, works, barrels	100 lbs.	2.75 @	2.85
less car lots, works, barrels	100 lbs.	3.00 @	3.10
solution, 35-40 p.c., works, car lots, carboys	100 lbs.	1.95 @	2.10
Bromide, barrels	lb.	.31 @	.32
Cacodylate, jars	lb.	4.00 @	4.25
Carbonate (see Soda, ash, Soda monohydrated, Soda sal).			
Caustic, 76 p.c., flake, car lots, drums	100 lbs.	3.00 @	—
less car lots, drums	100 lbs.	3.84 @	3.99
ex warehouse	100 lbs.	3.74 @	—
contracts, car lots, works, drums	100 lbs.	2.95 @	—
electrolytic, car lots, works, drums	100 lbs.	2.90 @	—
less car lots, works, drums	100 lbs.	3.84 @	3.99
ground, car lots, drums,	100 lbs.	3.00 @	—
less car lots, drums	100 lbs.	3.84 @	3.94
ex warehouse	100 lbs.	3.74 @	—
contracts, car lots, works, drums	100 lbs.	2.95 @	—
liquid, seller's tanks	100 lbs.	2.20 @	—
buyer's tanks	100 lbs.	2.17½@	—
solid, car lots, drums	100 lbs.	3.00 @	—
less car lots, works, drums,	100 lbs.	3.44 @	3.59
ex warehouse	100 lbs.	3.34 @	—
contracts, car lots, works, drums	100 lbs.	2.55 @	—
electrolytic, car lots, works, drums	100 lbs.	2.50 @	—
less car lots, works, drums	100 lbs.	3.44 @	3.59
expert, drums	100 lbs.	2.80 @	3.10
Chlorate, dom., works, kegs	lb.	.05¾@	.07
Citrate, granular, U.S.P., VIII, barrels, cans, kegs	lb.	.24 @	.29
U.S.P. X, barrels, cans, kegs	lb.	.30½@	.35½
Cyanide, 96 to 98 p.c., dom., drums	lb.	.15½@	.16½
imported, cases	lb.	.16½@	.17
Fluoride, barrels	lb.	.07 @	.08¾
Glycerophosphate, crystals, 100-lb. lots, barrels, cans	lb.	1.15 @	—
solution, 75 p.c., cans	lb.	.90 @	—
50 p.c., cans	lb.	.55 @	—
Hydrosulphite, barrels	lb.	.20 @	—
Hydrosulphide, barrels	lb.	.22 @	.26
Hydroxide, U.S.P., sticks, 100-lb. lots, cans	lb.	.20¼@	—
Hypophosphite, cans	lb.	.60 @	.65
Hyposulphite, crystals, large, barrels	100 lbs.	2.40 @	2.75
pea, barrels	100 lbs.	2.50 @	3.00
granular, barrels	100 lbs.	2.75 @	3.25
Iodide, jars	lb.	2.75 @	2.80
Metanilate, kegs	lb.	.41 @	.42
Metasilicate, crystals, car lots, works, barrels	100 lbs.	3.25 @	—
less car lots, delivered, barrels	100 lbs.	5.05 @	5.30
granular, car lots, works, bbls	100 lbs.	2.85 @	3.00
less car lots, delivered, barrels	100 lbs.	3.60 @	4.00
Monohydrated, barrels	100 lbs.	2.60 @	—
works, barrels	100 lbs.	2.30 @	—
Naphthionate, barrels	lb.	.52 @	.54
Nitrate, Apr.-June del., ex-vessel, ports, 100-lb. bags	ton.	25.90	@26.50
200-lb. bags	ton.	25.20	@25.80
bulk	ton.	23.90	@—
refined, granular, barrels	lb.	.03 @	.03½
powdered, barrels	lb.	.03¾@	.04¼
Nitrite, 96-98 p.c., domestic, car lots, barrels	lb.	.07¼@	.07½
less car lots, barrels	lb.	.08¼@	.08½
imported, l.c.l., casks	lb.	.08¾@	.09
Oxalate, neutral, bbls., kegs	lb.	.08 @	.12
Perborate, N.F., barrels	lb.	.17 @	.19
Phosphate, dibasic, technical, car lots, bags	100 lbs.	1.80 @	2.20
barrels	100 lbs.	2.00 @	2.40
less car lots, bags	100 lbs.	2.05 @	2.45
barrels	100 lbs.	2.25 @	2.65
U.S.P., granular, barrels	lb.	.06½@	.07
tribasic, car lots, works, bags	100 lbs.	2.20 @	2.25
barrels	100 lbs.	2.30 @	2.35
less car lots	100 lbs.	2.45 @	2.50
Picramate, kegs	lb.	.67 @	.69
Prussiate, yellow, domestic, works, contracts, bbls	lb.	.11½@	—
prompt shipment	lb.	.12 @	.13
foreign, contracts, casks	lb.	.11¼@	—
prompt shipment, casks	lb.	.12 @	—
Pyrophosphate, barrels	lb.	.19 @	.24
Sal, bags	100 lbs.	1.00 @	—
barrels	100 lbs.	1.10 @	—
works, bags	100 lbs.	.90 @	—
barrels	100 lbs.	1.00 @	—
Salicylate, boxes	lb.	.47 @	—
Silicate, 40 deg. turbid, works, drums	100 lbs.	.75 @	—
tanks	100 lbs.	.60 @	—
60 deg., works, drums	100 lbs.	1.65 @	—
Silicofluoride, barrels	lb.	.05 @	.06
imported, barrels	lb.	.04½@	.05¼
Stannate, drums	lb.	.19 @	.22½
Stearate, lumps, works, barrels	lb.	.20 @	—
powder, works, barrels	lb.	.22 @	.28
Sulphate, anhydrous, domestic, barrels	lb.	.02 @	.02½
imported, barrels	lb.	.01¾@	.02
crystal (see Glauber's salt).			
Sulphide, 30% crystals, domestic, works, bbls	100 lbs.	2.35 @	2.65
imported, barrels	100 lbs.	2.37½@	2.40
60% broken, dom., cks	100 lbs.	3.00 @	3.25
Sulphite, crystals, barrels	lb.	.03 @	.03¼
powdered, barrels	lb.	.09½@	.09
Sulphocarbolate, cases	lb.	.23 @	.25
Sulphocyanide, drums, tins	lb.	.30 @	.42½
Sulphoricinoleate	lb.	.12 @	—
Tungstate, tech., kegs	lb.	.57 @	.67
chemically pure, kegs	lb.	1.37 @	—
Solvent naphtha, water white, drums	gal.	.31 @	—
tanks	gal.	.26 @	—
high flash, works, drums,	gal.	.35 @	—
tanks	gal.	.30 @	—
Sparteine sulphate, cans	oz.	.35 @	.40
Spearmint leaves, bales	lb.	.16 @	.22
Spikenard root, bales	lb.	.07 @	.08
Spruce extract, works, tanks	lb.	.0087@	—
barrels	lb.	.01¼@	—
super, works, tanks	lb.	.01¼@	—
barrels	lb.	.01¾@	—
powdered, barrels, boxes	lb.	.12 @	.13
Squaw vine leaves, bales	lb.	.11 @	.12
Squill, red, bales	lb.	.14 @	.15
white, bales	lb.	.05 @	.05½
powdered, barrels, boxes	lb.	.12 @	.13
St. John's bread, bales	lb.	.05 @	.06
St. Ignatius beans, bags	lb.	.75 @	.80
Starch, corn, pearl, bags	100 lbs.	2.24 @	2.35
powdered, bags	100 lbs.	2.34 @	2.45
potato, domestic, bags	lb.	.03¾@	.04½
imported, bags	lb.	.05 @	.05½
rice, barrels	lb.	.07 @	.08
wheat, bags	lb.	.05¾@	.06¼
Starch, iodide, bottles	lb.	1.77 @	—
Staveacre seed, bags	lb.	.13 @	.14
Stearin, oleo, barrels	lb.	.04 @	.04½
Stillingia root, bales	lb.	.06 @	.07
Stoneroot, bales	lb.	.06½@	.07
Storax, cases	lb.	.32½@	.33
Stramonium leaves, bales	lb.	.09 @	.10
Seed, bags	lb.	.09 @	.10
Strontium bromide, barrels	lb.	.46 @	.47
Carbonate, pure, barrels	lb.	.26 @	.36
Iodide, jars	lb.	3.00 @	3.05
Nitrate, domestic, works, bbls,	lb.	.07¼@	.07½
imported, casks	lb.	.07½@	.08
Strophanthus seed, Kombe, bags,	lb.	1.45 @	1.50
Strychnine acetate, cans	oz.	.65 @	—
Alkaloid, crystals, cans	oz.	.37 @	.41
powdered, cans	oz.	.27 @	.31
Arsenate, cans	oz.	.65 @	—
Glycerophosphate, cans	oz.	.65 @	—
Hydrochloride, cans	oz.	.65 @	—
Hypophosphite, cans	oz.	.75 @	—
Nitrate, cans	oz.	.60 @	—
Phosphate, cans	oz.	.65 @	—
Sulphate, crystals, cans	oz.	.34 @	.38
powdered, cans	oz.	.24 @	.28
Sugar coloring, barrels	gal.	.51 @	.55
Sugar of milk, barrels	lb.	.16 @	.18
Sulphonmethane, kegs	lb.	3.05 @	3.10
Sulphonethylmethane, kegs	lb.	4.25 @	4.30
Sulphur, crude, mines, car lots, bulk	long ton.	18.00	@21.00
spot, nearby, car lots	long ton.	21.00 @	—
ex vessel, New York, Philadelphia, Baltimore, Southern ports, bulk	long ton.	22.00	@25.00
Boston, Portland, bulk	long ton.	22.50	@25.50
flour, commercial, bags	100 lbs.	1.55 @	2.15
barrels	100 lbs.	1.90 @	2.50
extra fine, bags	100 lbs.	2.40 @	3.00
superfine, bags	100 lbs.	2.20 @	2.80
barrels	100 lbs.	2.55 @	3.10
rubbermakers', bags	100 lbs.	2.20 @	2.80
barrels	100 lbs.	2.55 @	3.15
Sulphur flour, refined, extra fine, barrels	100 lbs.	3.15 @	3.75
heavy, bags	100 lbs.	2.50 @	3.10
barrels	100 lbs.	2.85 @	3.45
light, bags	100 lbs.	2.60 @	3.20
barrels	100 lbs.	2.95 @	3.55
rubbermakers, bags	100 lbs.	1.85 @	2.45
flowers, bags	100 lbs.	3.10 @	3.70
barrels	100 lbs.	3.45 @	4.05
precipitated, kegs	lb.	.15 @	.17
broken, bags	100 lbs.	2.15 @	2.75
barrels	100 lbs.	2.30 @	2.90
roll, bags	100 lbs.	2.35 @	2.95
barrels	100 lbs.	2.50 @	3.10
Chloride, works, drums	lb.	.03½@	.04
tanks	lb.	.03 @	.04
Dioxide, liquid, commercial, works, cylinders	lb.	.07 @	.07½
multiple unit cars	lb.	.05 @	.05¾
tanks	lb.	.04 @	.05
refrigeration, works, cylinders	lb.	.10 @	.12
multiple unit cars	lb.	.06½@	.07¼
Iodide, bottles, jars	lb.	3.80 @	3.85
Sumac, domestic, Southern points, bags	ton.	35.00 @	—
Sicilian, ground, shipments,	bags. ton.	44.00	@48.00
Berries, bags	lb.	.06 @	.07
Extract, 42 deg., barrels	lb.	.05 @	.05½
51 deg., barrels	lb.	.06 @	.06½
Sicilian, stainless, barrels	lb.	.07 @	.08
Sunflower seed, Calif., bags	lb.	.05¾@	.06¼
Hungarian, bags	lb.	.05¾@	.05¾
Superphosphate, guaranteed, 16 p.c., f.o.b. Baltimore, bulk,	ton.	6.50 @	7.00
run-of-pile, basis 16 p.c., f.o.b. Baltimore, bulk	ton.	6.00 @	6.50

T

Talc, domestic, Eastern mines, bags	ton.	16.00	@18.00
Western mines, bags	ton.	18.00	@25.00
imported, Canadian, car lots, bags	ton.	22.00 @	—
less car lots, bags	ton.	27.50 @	—
French, ex-dock, to arrive,	ton.	18.00 @	—
ex-warehouse, bags	ton.	22.00	@23.00
high-grade, bags	ton.	35.00	@40.00
Italian, ex-dock, to arrive, bags	ton.	48.50 @	—
ex-warehouse, bags	ton.	53.50	@55.00
Talc, fibrous, car lots, bags	ton.	20.00 @	—
less car lots, bags	ton.	25.00 @	—
works, car lots, bags	ton.	13.00	@15.00
Tallow, animal, edible, bbls	lb.	.03¾	Nom.
extra, works, loose	lb.	.02½@	.02¾
special, works, loose	lb.	.02¼@	.02½
sulphonated, 25 p.c. (24 p.c. fat), car lots, drums	lb.	.04 @	—
less car lots, drums	lb.	.04½@	—
50 p.c. (43 p.c. fat), car lots, drums	lb.	.04¾@	—
less car lots, drums	lb.	.05¼@	—
50 p.c. (48 p.c. fat), car lots, drums	lb.	.05 @	—
less car lots, drums	lb.	.05½@	—
vegetable, Chinese, 51 titre, shipments, mats	lb.	.04½	Nom.
coast, shipment, mats	lb.	.03¾	Nom.
Tamarind, W.I., barrels	lb.	.05 @	.06
kegs	per keg	3.75 @	—
Tankage, animal, domestic, ground 10-15 p.c., bulk	unit-ton.	1.75 &	.10
unground, bulk	unit-ton.	1.65 &	.10
Chicago, high-grade, for feed, 11-12 p.c., bulk	unit-ton.	2.00 &	.10
fertilizer grade, 11-15 p.c., bulk	unit-ton.	1.10 &	.10
South American, to arrive,	unit-ton.	1.85 &	.10
garbage, f.o.b. Baltimore, bulk,	unit-ton.	.10 &	.70
Tansy leaves, bales	lb.	.12 @	.13
Tapioca flour, bags	lb.	.03 @	.05½
Tar, pine, kiln burned, bbls	gal.	.17 @	.19
retort, barrels	gal.	.18 @	.20
Tar acid oil, 15 p.c., drums	gal.	.21 @	.22
25 p.c., drums	gal.	.23 @	.25
Tartar emetic, technical, crystals, barrels	lb.	.21 @	—
powdered, barrels	lb.	.21 @	—
U.S.P., powdered, barrels	lb.	.26 @	.26¼
Terebene, cans	lb.	.65 @	.70
Terpenyl acetate, cans	lb.	.75 @	1.00
Terpin hydrate, kegs	lb.	.32 @	.33
Terpineol, C.P., cans	lb.	.31 @	.32
drums	lb.	.27 @	.29
Alpha, denaturing grade, drums, car lots	lb.	.14¾@	—
contracts	lb.	.13¾@	—
tanks	lb.	.14 @	—
contracts	lb.	.13 @	—
Terra alba, domestic, No. 1, works, bags, barrels	100 lbs.	1.15 @	1.75
No. 2, works, bags, barrels,	100 lbs.	1.00 @	1.25
imported, bags	lb.	.01¼@	.01¾
Tetrachlorethane, works, drums,	lb.	.08½@	—
Tetrachlorethylene, C.P., drums,	lb.	.25 @	.33
technical, drums	lb.	.14 @	.16
Tetralin, drums	lb.	.12 @	—
Theobromine, alkaloid, cans	lb.	1.60 @	1.75
Sodiosalicylate, cans	lb.	1.95 @	2.00
Thorium nitrate, works, 144-lb. cases	lb.	2.00 @	2.50
Thiocarbanilide, drums	lb.	.20 @	—
Thyme, French, bales	lb.	.06¾@	.07¼
Spanish, bags	lb.	No stocks	
Thymol, 100-lb. lots, bottles	lb.	1.25 @	—
smaller lots, bottles	lb.	1.30 @	1.35
Iodide, bottles	lb.	3.80 @	3.90
Tin, Straits	lb.	.2590@	—
Crystals, barrels	lb.	.25½@	.26
Oxide, from Straits tin, bbls	lb.	.29½@	—
Tetrachloride, anhy., bbls	lb.	.1395@	.1445
Titanium dioxide, bags, bbls	lb.	.18 @	.16¾
car lots, bags, barrels	lb.	.17 @	.17¼
Pigment, barium base, car lots, bags	lb.	.06 @	—
barrels	lb.	.06¼@	—
less car lots, bags, bbls	lb.	.06¼@	.06½
calcium base, car lots, bags,	lb.	.06 @	—
barrels	lb.	.06¼@	—
less car lots, bags, bbls	lb.	.06¼@	.06¾
Tolidin base, kegs	lb.	.88 @	.90
distilled, kegs	lb.	.95 @	1.00
Tolu, balsam, cans	lb.	.65 @	.70
Toluene (toluol), pure, works, drums	gal.	.35 @	—
freight allowed, tanks	gal.	.30 @	—
Toluidin, mixed, drums	lb.	.27 @	.28
Tonga vine, N. F., bales	lb.	.19 @	.20
Tonka beans, Angost, casks	lb.	1.40 @	1.50
Triacetin, drums	lb.	.32 @	.36
Trichlorethylene, drums	lb.	.09½@	—
Triethanolamine, works, drums,	lb.	.40 @	.42
Tricresyl phosphate, drums	lb.	.20½@	.44¼
Triphenyl phosphate, drums	lb.	.87 @	.89
Triphenylguanidin, drums	lb.	.58 @	.90
Tripoli, air-floated, car lots, works	ton.	22.50	@25.00
double ground, works	ton.	17.00	@18.00
single ground, works	ton.	16.00 @	—

Trisodium phosphate (see Soda phosphate tribasic)
Turmeric root, Aleppy, bags..lb. .05 @ .05½
Madras, bags.....lb. .05½@ .06
Turpentine (spirits), gum, ex-dock, barrels, car lots..gal. .42¾@ —
10-barrel lots.....gal. .44¾@ —
5-barrel lots.....gal. .46¾@ —
wood, destructive - distilled, drums..gal. .33 @ .35
steam - distilled, car lots, drums..gal. .3780@ —
less than car lots, drums, gal. .40 @ .41

U

Unicorn root, false (helonias), bales .....lb. .23 @ .25
true (aletris), bags.....lb. .15 @ .17
Uranium oxide, kegs.....lb. 1.50 @ —
Urea, 46 p.c., N, car lots, shipment, ex vessel, Atlantic ports, bags.....ton.82.60 @ —
Gulf ports, bags.....ton.82.60 @ —
pure, cases.....lb. .15 @ .17
Uva ursi leaves, bales.....lb. .04¾@ .05

V

Valerian root, U.S.P., bales...lb. .14½@ .15
Valonia beards, 42 p.c., shipments, bags..ton.29.00 @30.00
cups, shipment, bags.....ton.19.50 @20.50
Vanilla beans, Bourbon, tins..lb. .65 @ 1.25
Mexican, whole, tins.....lb. 3.00 @ 4.00
cuts, tins.....lb. 2.35 @ 2.50
South American, tins.....lb. 2.00 @ 2.25
Vanillin, domestic, ex-clove oil, tin..lb. 5.00 @ 5.75
ex-guaiacol, tins.....lb. 4.50 @ 5.25
Venice, turpentine, true, cases.lb. .25 @ .26
Verdigris, casks.....lb. .21 @ .23
V.M.P. naphthas, refinery, Bayonne, tankcars..gal. .08¾@ .09
Group 3, tankcars.....gal. .05 @ .06½
tankwagon, Boston.....gal. .14 @ .17
Chicago .....gal. .137 @ —
Des Moines.....gal. .178 @ —
Milwaukee .....gal. .19 @ —
Minneapolis .....gal. .193 @ —
Newark .....gal. .12 @ —
New York.....gal. .12 @ .14
St. Louis.....gal. .142 @ —
St. Paul.....gal. .193 @ —

W

Wahoo bark, bales.....lb. .13 @ .14
Root, bark, bales.....lb. .26 @ .27
Wattle bark, shipments, bags.ton.24.00 @ —
Extract, 55 p.c., barrels..lb. .05¾@ —
Wax:—
Bayberry, imported, bags....lb. .14 @ .15
Bees, white, pure, cases.....lb. .30 @ .33
yellow, common, African, bags..lb. .13½@ .14
Brazilian, bags.....lb. .16 Nom.
Chilean, bags.....lb. .15 @ .15¼
refined, cases.....lb. .20 @ .30
Candelilla, bags.....lb. .09 @ .10
Carnauba, flor, bags.....lb. .23 @ .24
No. 1, yellow, bags.....lb. .20 @ .22½
No. 2, yellow, bags.....lb. .20 @ .21½
No. 2, North Country, bags. lb. No stocks.
No. 3, chalky, bags.....lb. .11½@ .12¾
No. 3, North Country, bags. lb. .11½@ .12½
Ceresin, imported, snow white, 145-147 m.p., bags..lb. .23 @ .24
154-156 m.p., bags.....lb. .24 @ .25
158-160 m.p., bags.....lb. .25½@ .26
160-165 m.p., bags.....lb. .26½@ .27
Japan, cases.....lb. .05½@ .06
Montan, crude, bags.....lb. .03¾@ .04
Ozokerite, hard green, c.p., 66-68 deg. C., bags..lb. .26 @ —
c.p. 70-72 deg. C., bags..lb. .28 @ —
c.p. 74-76 deg. C., bags..lb. .30 @ —
Paraffin (see P).
Spermaceti blocks, cases....lb. .16 @ .17
cakes, cases.....lb. .17 @ .18
White lead (see Lead, white).
White pine bark, rossed, bales.lb. .05½@ .06
White precipitate, boxes, fibre drums, barrels..lb. 1.31 @ —
Whiting, chalk, commercial, bags, barrels..ton.13.00 @14.00
gilders, bolted, bags, barrels..ton.15.00 @16.00
extra, bolted, bags, barrels..ton.18.00 @19.00
cliffstone, English, Paris white, bags, barrels..ton.30.00 @40.00
limestone, ground, car lots, bags..ton. 6.50 @10.00
Wild cherry bark, thick, natural, bales..lb. .04 @ .05
rossed, bales.....lb. .06 @ .07
thin, natural, bales.....lb. .05½@ .06
rossed, green, bales....lb. .07½@ .08
Wild indigo root, bags.....lb. .09 @ .10
Window glass, per 50-foot box:—

United inches.	Bracket sizes,	Single AA	Single A	Single B
25	6x 8 to 10x15	$24.00	$20.00	$19.00
34	11x14 / 12x13 to 14x20	25.00	21.00	20.00
40	10x26 to 16x24	27.00	22.50	21.00
50	18x22 / 20x20 to 20x30	28.00	28.70	22.00
54	15x36 to 24x30	29.00	24.50	22.50
60	26x28 to 24x36	30.00	20.00	23.20
70	26x34 / 28x32 / 30x30 / 32x38 to 30x40	32.00	28.75	25.20
80	34x36 to 30x50	36.50	32.25	28.70

		Double AA	Double A	Double B
25	6x 8 to 10x15	$32.00	$28.00	$26.54
34	11x14 / 12x13 to 14x20	35.00	31.00	29.00
40	10x26 to 10x34	39.00	34.00	31.60
50	18x22 / 20x20 to 30x30	42.00	37.00	34.50
54	15x36 to 24x30	43.00	38.00	35.00
60	26x28 to 24x36	44.00	30.00	35.50
70	26x34 / 28x32 / 30x30 / 32x38 to 30x40	47.00	42.00	38.00
80	34x46 to 30x50	51.00	46.00	41.50
84	30x52 to 30x54	52.00	47.00	42.50
91	34x58 to 34x60	56.00	51.00	47.00
100	36x60 to 40x60	66.00	60.00	56.00
90	30x56 to 34x56	55.00	50.00	46.00

The schedule of discounts applying to quotations on window glass, except the Pacific Coast district, is as follows:—Single strength, "B" quality, first 3 brackets, 92 & 4 percent; all brackets above that size, 91 & 6 percent. Single strength, "A" quality, first 3 brackets, 90 & 4 percent, all brackets above that size, 89 & 6 percent. Double strength, "B" quality, all brackets, 91 & 6 per cent. Double strength, "A" quality, all brackets, 89 & 6 percent.
The schedule of discounts for the Pacific Coast district is as follows:—Single strength, "B" quality, first 3 brackets, 90 & 30 percent; all brackets above that size, 89 & 30 percent. Single strength, "A," first 3 brackets, 88 & 30 percent; all brackets above that size, 88 & 20 percent. Double strength "B," all brackets, 89 & 30 percent. Double strength "A," all brackets, 88 & 20 percent.
The following boxing charges apply on all orders for single-strength and double-strength glass:—First three bracket sizes, 10c. per 50-foot box; above, up to and including 100 united inches, 20c. per 50-foot box; sizes over 100 united inches, 40c. per 50-foot case; for glass packed 100 feet to the case the charges are double the amount charged for the same size packed 50 feet to the box.
The following fractional cutting charges apply:—Single strength, 1 fraction, 25c. per 50-foot box; 2 fractions, 50c. per 50-foot box; double strength, 1 fraction, 35c. per 50-foot box; 2 fractions, 70c. per 50-foot box
Witch hazel extract, distilled, N, F, barrels.....gal. .55 @ .65
Leaves, bales.....lb. .06 @ .07
Wood flour, domestic, standard, grade, works, car lots, bags..20.00 @27.00
finer grades, works, bags, ton.27.00 @36.00
imported, ex-dock, 40 mesh, bags—ton.15.50 @ —
50 mesh, bags.....ton.17.50 @ —
60 mesh, bags.....ton.18.50 @ —
70 mesh, bags.....ton.19.50 @ —
80 mesh, bags.....ton.22.00 @ —
100 mesh, bags.....ton.24.00 @ —
120 mesh bags.....ton.26.00 @ —
Wormseed, American, bags...lb. .06½@ .07
Levant, bags.....lb. 2.75 @ 3.00
Wormwood, bales.....lb. .08 @ .09

X

Xylene (xylol), 5 deg., works, drums..gal. .37 @ —
freight allowed, tanks....gal. .32 @ —
10 deg., works, drums.....gal. .32 @ —
freight allowed, tanks....gal. .27 @ —
commercial, works, drums.gal. .31 @ —
freight allowed, tanks....gal. .26 @ —
nitration, works, drums....gal. .42 @ —
freight allowed, tanks....gal. .37 @ —
Xylidin, drums.....lb. .36 @ .37
Xylol (see Xylene).

Y

Yara yara, crystals, cans.....lb. 1.25 @ 1.85
Yellow:—
Cadmium, barrels, kegs.....lb. .40 @ .45
ton lots..lb. .35 @ —
sulphide, boxes.....lb. .65 @ .75
Chrome, C.P., dry, ton lots, barrels..lb. .15 @ —
contracts, 1933.....lb. .14 @ —
in oil, cans.....gal. 5.04 @ 9.70
Dutch pink, barrels.....lb. .08 @ .10
Iron oxide, natural, barrels.lb. .04 @ .05
precipitated, barrels.....lb. .08 @ .10
Mercury oxide (see M).
Ocher, dry, domestic, golden, bbls..lb. .03¾@ .07½
yellow, barrels.....lb. .01¾@ .02¾
f.o.b. works.....lb. .01 @ .01½
French, dark, car lots, casks lb. .0195@ .0210
l.c.l., casks.....lb. .02½@ —
extra light, car lots, casks lb. .0220@ .02½
l.c.l, casks.....lb. .0275@ .0280
light, car lots, casks..lb. .0215@ —
l.c.l., casks.....lb. .0270@ .08
medium, car lots, casks lb. .0205@ —
l.c.l., casks.....lb. .0270@ .03
in oil, cans.....gal. 3.30 @ —
Zinc, barrels.....lb. .19 @ —
contracts, 1933.....lb. .18 @ —
Yellow dock root, bales.....lb. .07 @ .08
Yellow root (xanthoriza), bales. lb. .09 @ .10
Yerba santa leaves, bales....lb. .07½@ .08
Yohimbine hydrochloride, vials. oz. 1.80 @ 1.85

Z

Zinc (see daily quotations in market report).
Carbonate, technical, barrels.. lb. .09½@ .11
U.S.P., precipitated, powdered, barrels..lb. .28 @ .30
Chloride, fused, works, drums. lb. .05 @ .05¾
granular, works, drums...lb. .05¾@ .06¼
solution, works, tanks. ..lb. .03 @ —
Cyanide, drums.....lb. .38 @ .42
Dust, car lots, barrels.....lb. .0545@ .0595
less car lots, barrels.....lb. .0645@ .0670
Fluoride, barrels.....lb. .15 @ .20
Iodide, bottles, jars.....lb. 4.20 @ 4.25
Zinc oxide, pigment, domestic, American process, commercial, lead free, 2-ton lots, bags..lb. .05¾@ —
barrels .....lb. .06 @ —
smaller lots, barrels. lb. .06 @ —
bags .....lb. .06¼@ —
leaded grades, 5 p.c., 2-ton lots, bags..lb. .05½@ —
barrels .....lb. .05¾@ —
smaller lots, bags..lb. .05¾@ —
barrels .....lb. .06 @ —
10 or 25 p.c., 2-ton lots, bags..lb. .05½@ —
barrels .....lb. .05¾@ —
smaller lots, bags..lb. .05 @ —
barrels .....lb. .06 @ —
35 p.c., car lots, bags lb. .0490@ —
2-ton lots, bags.lb. .05¼@ —
barrels .....lb. .05½@ —
smaller lots, bags.lb. .05½@ —
barrels .....lb. .06 @ —
French process, commercial, lead free, 2-ton lots, bags..lb. .05¾@ —
barrels .....lb. .06 @ —
smaller lots, barrels. lbs. .06¼@ —
green seal, 2-ton lots, bags..lb. .09¾@ —
barrels .....lb. .09¾@ —
smaller lots, bags.lb. .09¼@ —
barrels .....lb. .10¼@ —
red seal, 2-ton lots, bags. lb. .08¾@ —
barrels .....lb. .08¾@ —
smaller lots, bags..lb. .08¾@ —
barrels .....lb. .09 @ —
white seal, 2-ton lots. barrels..lb. .10¾@ —
smaller lots, barrels. lb. .11¼@ —
imported, green seal, ex dock, barrels..lb. .09 @ —
ex warehouse, barrels..lb. .09¼@ .09¾
red seal, ex dock, barrels. lb. .08 @ —
ex warehouse, barrels..lb. .08¼@ .08½
white seal, ex dock, barrels..lb. .10¼@ —
ex warehouse, barrels..lb. .10¼@ —
U.S.P., car lots, barrels..lb. .12¾@ —
less car lots, barrels....lb. .12¾@ —
Palmitate, barrels.....lb. .17½@ .18½
Resinate, fused, dark, hard, barrels..lb. .05¾@ .06¾
precipitated, barrels.....lb. .12 @ .13
Stearate, technical, precipitated, barrels..lb. .16½@ .18
car lots.....lb. .16 @ —
U.S.P., barrels.....lb. .16 @ .17
Sulphate, crystals, barrels..lb. .03 @ .03½
car lots, works, barrels.. 100 lbs. 2.65 @ —
Sulphide, car lots, barrels..lb. .13 @ —
less car lots, barrels.....lb. .13½@ —
Sulphocarbolate, N.F., barrels. lb. .21 @ .23
Zinc-ammonia chloride, casks.lb. .04¾@ .05½
Zirconium nitrate, works.....lb. 3.00 @ 4.00
Oxide, crude, 53 p.c., grd., works, barrels..ton.42.00 @50.00
small lots, works, kegs. lb. .02¾@ —
73-75 p.c., grd., works, barrels..ton.65.00 @75.00
small lots, works, kegs. lb. .04¼@ —
white, 98 p.c., works, kegs. lb. .90 @ 1.20

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Mandatory Work-Sharing

That which business cannot or will not do for itself to adjust its policies and practices to the general economic need, will, soon or later, be attempted by external agencies. Business, itself, all too frequently turns to government for the remedying of ills which should be treated by business. Government is the agency to which turn all those who, with more or less cause, are dissatisfied with certain aspects of business activities. And the treatment eventually undertaken by government in consequence of such calls for interference in the affairs of business is often more drastic than efficacious.

A group of earnest business leaders has striven mightily over many recent months to inaugurate in industry a sharing of work so that more men may be employed. These efforts have been somewhat successful—there is a vast difference in the opinions of manufacturers' organizations and those of labor organizations with respect to the measure of this success—but the fact remains that the Federal government's data show that, in February, manufacturing employment was 42.5 percent below the level of the 1926 average and that it had decreased almost 12.5 percent since February, 1932. This fact presents a serious condition. It does not indicate, however, that the task of restoring employment to the status essential to business recovery is beyond the ability of business. But, it does suggest that business has not done all that is necessary.

There is nothing surprising, then, in the attempt now being made in Congress to make work-sharing mandatory by limiting the workweek in manufacturing. Organized labor has declared that no other means offered a promise of success. Those who desire relief did but do as all who have faced similar conditions have always done: they turned to government. And government, always willing to respond to the cries of certain needy, has undertaken to make business apply a specified treatment to its ills.

In the light of the decision of the Supreme Court of the United States with respect to the child labor law, the constitutionality of a Federal law fixing the hours of labor is, at most, doubtful. But, the more recent approval of the oleomargarin tax law by the supreme court gives support to the belief of those who argue that it is a legal function of government to secure the better distribution of employment and national wealth, that is essential to the restoration of good times. How far the government could go toward this purpose is a question for the courts to decide.

Aside from the matter of its validity, the attempt of the government to fix the hours of a man's work raises a large question of policy. Business could not readily readjust itself to meet the demands of this mandate. The bill in Congress, furthermore, is so rigid in its provisions that the practicability of the measure is greatly to be doubted. There are, too, many inconsistencies in the measure, when its provisions are analyzed by comparison with actual economic needs. For one thing, the provisions of the bill would not apply to "agricultural or farm products processed for first sale by the original producer." The farmer's day is a long one and his week is one of seven days. But, much farm labor is unemployed. On the other hand, bread and meat are included within the proscriptions of the bill, and these are as necessary as farm products; their preparation requires long workdays; and the need for employment in the baking and meat industries is no greater than in agriculture. It must be considered, of course, that there are no official data on the state of farm employment and that farm labor is not strongly organized.

The bill makes provision for the exempting of manufacturing operations wherein special conditions require men to work more than six hours a day. This, apparently, would enable chemical manufacturers satisfactorily to operate continuous processes and those requiring special attention. There is nothing in the bill, however, to enable the pharmaceutical manufacturer to keep his trained men at work when an epidemic, a catastrophe, or other emergency made overtime operations necessary.

Business can and does create, or at least permit, conditions which it cannot, or at least does not, control. There is a better way out of this than is afforded by government interference which is usually more burdensome than remedial. It is time that business proved that it knows this better way and that it is able and willing to follow it. The shorter-hours bill should not be passed. But, business must show clearly that the enactment of such a law is unnecessary.

The Muscle Shoals Threat

One of the major causes of the economic inflation that preceded the collapse in 1929 was the largely uncontrolled attempt to keep employed in production and distribution a far greater number of persons than was warranted by any possible consumption of the goods which they made or endeavored to sell. So, it is quite essential that, in evaluating any plan for increasing employment, serious thought be given to the general effects of the results of such employment. The proposed development by the government of the power and chemical resources centering at Muscle Shoals is a case in point. This project would produce far more to be disposed of than could be balanced by the market it would afford for the materials of contributory enterprises. It would be very likely to repeat the effects of the automotive industry which destroyed the economic balance for exactly the same reason. When the difference in total value between the materials consumed and the commodities produced by an industry exceeds a certain proportion, that industry ceases to be an economic asset.

There are, no doubt, large opportunities for the utilization of power that might be made available from Muscle Shoals. But, is there a market for the products which would result from the full utilization of that power? Certainly it cannot be argued that the industrial development based on the power would, in itself, create a sufficient market for its products. Productive capacity is already far in excess of consuming demand for the products of industry at large. Further to increase production would be simply to aggravate the existing overcrowding of competition and to diminish the aggregate industrial net income of the country. There is room for improvement in the power industry, improvement in its services, improvement, in the sense of general interest, in its charges for service. It is not clear, however, that the desirable and necessary improvement could not be better attained by a more direct application of control than would be possible by means of unnecessarily increased competition. Competition is the life of trade, but in this, as in other ways, life can be made entirely too strenuous.

It is with respect to its proposals for the manufacture and distribution of fertilizers that the Muscle Shoals project is most difficult to reconcile with today's economic needs. These fertilizers are to be made with the existing equipment, altered, modified, or improved as may be deemed necessary, or the operating board may construct new plants. The products of whatsoever operating activities may be decided upon are to be donated for experimental purposes to determine the value of new fertilizers and new fertilization practices. Perhaps, the employment created in this manner will take into the experimental production, distribution, and application of the Muscle Shoals fertilizers as many men as it will take out of the private fertilizer plants whose markets will be taken away by the government donations. But, what of the investments in these plants? Are these to be reduced to nothing by a truly socialistic scheme to aid the farmer?

When the nitrogen plant was constructed at Muscle Shoals, the United States needed its products. The United States has today productive capacity for far more nitrogen than it is likely to consume until agriculture becomes more intensive than expansive in its practices. As that condition depends wholly on the development of a broader, less costly plan of marketing agricultural products and the more general adoption of agriculture as a largely self-sufficient means of livelihood, the day of sufficient nitrogen consumption is far off.

The Muscle Shoals nitrogen plant should have been made available for the supplying of its quota of the national need for nitrogen at least ten years ago. Political bickering prevented the proper utilization of this industrial resource. Private enterprise, with considerable misgiving it must be said, has developed a splendid nitrogen industry in the United States. The whims of politicians with respect to the Muscle Shoals plant have always hung as a threat over the head of this industry. Is this threat now to fall and crush one of the finest, most necessary industries in the country? It is if the farmer is to be largely supplied with free fertilizers. In all fairness to a deserving industry, the government, if it must engage in the manufacturing of fertilizers, can do no less than restrict its donation to a reasonable proportion of the fertilizers which the donee has purchased from domestic manufacturers, or give all to those who will be forced to take up farming because their fertilizer markets have been "commandeered." Government competition with private enterprise is not in keeping with the American idea.

Alcohol in Motor Fuel Has New Phase

Rising Price of Corn Brings Question of Need, but Farm Organizations See Permanent Benefits

The recent strengthening of prices for corn and other grains is bringing into prominence another angle of the movement for compulsory blending of grain alcohol with motor-fuel gasoline as a farm relief measure. The question now agitating many quarters which have closely followed developments in the situation is:—What will be the effect on this project of the further substantial price advances which many grain trade authorities expect?

Proponents of the plan are studying this phase. It is admitted that, if corn prices advanced materially from this point, it would place a serious obstacle in the way of the plan's early realization. It also is asserted by some that a sufficiently high corn price would obviate the need for such a means of relief.

Farm organization authorities, however, are inclined to take the long-range view of the whole subject. It has been stated by those most active in sponsoring the proposal that it is not a plan to meet the immediate emergency, but one for more or less permanent operation. For instance, farm leaders recently stated in a meeting in Chicago that the alcoholized fuel project is by no means a substitute for the domestic allotment plan. It is pointed out that the alcohol plan would have the advantage, after being put in operation, of providing a new outlet for farm products instead of requiring reduced production.

May corn in Chicago around 33 cents, as at this writing, is notably higher than six weeks ago when the alcohol blending campaign was getting into its stride, and again is around levels of a year ago. Farm relief leaders have discussed 60 cents a bushel as a level desirable for the restoration of a large measure of buying power to the farm belt and a figure possible under the proper functioning of the blending plan.

Meanwhile, all sides of the question are being subjected to perhaps the most minute and detailed consideration that any technical-economic subject of this nature has received in recent years, from both friendly and hostile angles. Farm organizations, oil companies, corn-processing concerns, business men in many lines, government officials, university technologists, and various other groups are studying the shaping of this question with much interest. A vast amount of original research and experimental work is being done, as well as correlation of reports on results of old tests.

The Agricultural Interest

One of the focal points of interest is the Illinois Agricultural Association, headed by Earl Smith. This association has stated that it is trying to get at the facts, without blind or blanket endorsement of the plan as a cure-all for farm troubles. This is the association backing the first large-scale survey of public preferences after trying alcoholized motor fuel, through more than a dozen service stations co-operating with the association's affiliate, the Illinois Farm Supply Company.

Mr. Smith states that the whole problem has been approached with an open mind, with a view of ascertaining actual conditions, rather than trying to confirm preconceived notions. The association has received and studied a copy of a report by the United States Bureau of Standards on alcohol as motor fuel.

Ethyl or grain alcohol can be used as a substitute for gasoline in automobile engines, the bureau states, although such engines cannot be started cold with alcohol alone in freezing weather. Used in the same engine, it is probable that gasoline and alcohol can produce about the same maximum horsepower. Alcohol contains less energy than gasoline, and thus the engine, when suitably adjusted to the requirements of each fuel, will require about 1½ gallons of alcohol to equal one gallon of gasoline in total power output. A much better performance is claimed for alcohol and alcohol-gasoline blends by Dr. Henry Arnstein, Philadelphia, in a commentary printed below.

Bureau of Standards Comment

In its comment on the use of alcohol as, or in, a motor fuel, the Bureau of Standards says:—

When alcohol is mixed or blended with gasoline, there is for each blend some temperature below which the mixture will separate into layers, the upper layer being mainly gasoline and the lower layer mainly alcohol. The smaller the proportion of alcohol in the blend, the greater the content of water in the alcohol used and the higher will be the temperature of separation. Thus, using commercial 95-percent alcohol, mixtures containing less than 25 percent of alcohol will separate at ordinary temperature.

To make alcohol-gasoline blends containing less than 10 percent of alcohol, it is necessary to use absolute alcohol or to use some blending agent, such as ether, acetone, aromatics, or higher alcohols. If such mixtures collect small amounts of moisture by leakage or "sweating" of tanks, they will separate into two layers with the alcohol on the bottom. Under these circumstances, carburetor trouble would be experienced and starting might be impossible in cold weather. The development of more efficient blending agents may reduce the tendency of absorbed moisture to cause separation of alcohol-gasoline blends.

Blends of alcohol and gasoline containing less than 15 percent of alcohol sometimes can be substituted for gasoline without readjustment of carburetors. These blends give leaner fuel-air mixtures than gasoline alone; hence, if the carburetor is adjusted for an over-rich mixture, the alcohol blend substituted for gasoline may give equal fuel economy.

Alcohol and fuels containing alcohols may be corrosive to some metals used in fuel tanks and fuel lines, although not sufficiently so to prevent the use of such fuels in cars as they are now made. New fuel systems designed for use with alcohol-gasoline blends should be made from metals not subject to this corrosion.

Interest Spreads Widely

Manufacturers of agricultural supplies and equipment are taking a keen interest in the alcoholized fuel project. The research division of the Keystone Steel & Wire Company, manufacturer of fencing and other metal products, Peoria, Ill., has prepared and circulated a pamphlet designed to show the practical usefulness and economic benefits of the proposal to blend farm-product alcohol with motor-fuel gasoline.

In a new report, printed below, the Iowa State College of Agriculture and Mechanic Arts presents data on the cost of constructing corn-alcohol plants. These data are largely academic. They presuppose the doubtful practicability of small plants, and the costs presented are rather low in all instances. The figures given for salaries of superintendents and similar employees are not matched in practice even under the reduced scales prevailing today. Several necessary operations appear to have been overlooked, for example, the cost of malting barley. In comparison with present experience, the college's figures on the working capital required are low, and its allowance for depreciation is not adequate.

Governor Bryan of Nebraska, in a recent message, had this to say about the economic possibilities of alcoholized motor fuel:—

If the fuels are required to contain 10 percent or more of ethyl alcohol, the tremendous influence on the price of corn and the large new market that will be immediately developed may be readily seen. The corn producing States lost one of their best markets when the motor took the place of the horse. Now that it is shown conclusively that motor cars, as well as horses, can be run by corn, it is only fair that the market which was destroyed by the advant of the motor, can and should be restored again through the same agency.

Oil Trade Sentiment

Ultimate oil trade sentiment on the whole question is still an unknown quantity. Some disposition has appeared in certain oil industry circles to take a passive position, on the theory that loss of volume of gasoline by blending might be offset by enhanced farm purchasing power if the plan is successful. On the other hand, many leading figures in the oil business remain strongly opposed to the plan in any form. Others are willing to consider possibilities of blending in small percentages. Some companies, foreseeing success of the plan, are studying the possibilities of setting up their own alcohol distillation facilities or making investments in alcohol corporations.

E. B. Reeser, president of Barnsdall Corporation, is one of the few leading oil men to come out in qualified support of some alcohol-blend plan. Speaking before the Tulsa Chamber of Commerce recently, Mr. Reeser, a former president of the American Petroleum Institute, stated that his company's investigation of the plan had convinced him that a 10 percent blend of alcohol in gasoline, if produced under governmental specifications, would provide an annual market for 600,000,000 bushels of corn and thus aid materially in increasing the farmer's purchasing power.

"Unless some such step is taken, the nation's oil industry will soon lose almost entirely its agricultural support," said Mr. Reeser. "Farmers all over the country are being compelled to abandon motor-driven vehicles and tractors for horse-drawn equipment." He added that the alcohol-blend plan would create a buying power that would more than recompense refiners for the slight additional cost of the motor fuel. He also stated that this mixture, if properly supervised, would be handled in such a way as to halt gasoline tax evasion and gasoline bootlegging.

Corn Alcohol Plant Costs

The fourth progress report in the study by the Iowa State College of Agriculture and Mechanic Arts of the use of alcohol in motor fuel is devoted to construction and operating costs for corn alcohol plants. This report affords many data valuable for the light they throw on the practicability of making alcohol on the farm. (The possibility and cost of keeping alcohol so made in legitimate channels is a wholly different phase of the subject.)

This fourth in the series of reports is the work of the department of chemical engineering of the college engineering division. Earlier reports on other phases, the work of various departments of the college, have been printed in earlier numbers of the REPORTER. The fourth report is as follows:—

Introduction

The consideration that is given to the proposed blending of corn alcohol with gasoline emphasizes the need for a presentation of available data on the investments necessary to carry out the technical phase of the production of alcohol from corn. Included in the data necessary for ascertaining the feasibility of establishing new corn alcohol plants in the corn belt are:—(1) the initial cost of equipment and buildings, (2) cost of ground, (3) limiting values of alcohol per gallon, (4) limiting cost of corn per bushel, (5) returns of the investment, and (6) operating costs.

(Continued on page 30A)

Willard Gibbs Medal Is Awarded Dr. Willstaetter

A jury of twelve American leaders representing every branch of chemistry has awarded the Willard Gibbs Medal for 1933, to Dr. Richard Willstaetter of Munich, Germany. This medal is an outstanding distinction in the field of chemistry which is bestowed annually by the Chicago Section of the American Chemical Society for work in either pure or applied science which has received world-wide recognition. Dr. Willstaetter, who was a Nobel prize winner in 1915, has been recognized as a world leader in organic chemistry, his work in the chemistry of chlorophyll having been hailed as equaling in its sphere the work of his fellow-countryman and co-religionist, Dr. Albert Einstein, in the field of mathematics and physics.

Dr. Willstaetter, who is sixty years old, has been honored by scientific societies all over the world and last year was awarded the Davy Medal of the Royal Society in London. His first great work of independent research was with the cocaine alkaloids, the result of which culminated in the synthesis of cocaine. He next attacked the quinines and quininoid substances and discovered ortho-quinine and proof of the structure of anilin black. Many other notable achievements have been credited to him.

The medal will be formally presented to Dr. Willstaetter in Chicago on September 13 during the eighty-sixth meeting of the American Chemical Society, which will be held in connection with the Century of Progress Exposition. A distinguished group of American and European scientists will witness the ceremony.

Narcotics Convention Is To Be Effective July 10

The Department of State is informed that ratifications of the Narcotics Limitation Convention of 1931 had been deposited April 10 with the Secretariat of the League of Nations by twenty governments and accessions by nine. Under the terms of the convention, it is to come into force ninety days after the Secretary-General of the League of Nations has received the ratifications or accessions of twenty-five States, which must include at least four of eight specified manufacturing nations. The convention will, therefore, go into force July 10, in respect of the twenty-nine nations referred to above.

The manufacturing nations which have now ratified or acceded are:—France, Germany, Great Britain, Turkey and United States of America.

The other nations which have ratified ore acceded are:—Brazil, Canada, Chile, Cuba, India, Italy, Mexico, Monaco, Portugal, Spain, Sweden, Uruguay, Belgium, Dominican Republic, Egypt, Lithuania, Bulgaria, Costa Rica, Nicaragua, Persia, Peru, Sudan, Salvador, Hungary.

This convention is confidently expected to constitute an effective and important step in the direction of suppressing the evils of the illicit drug traffic and of reducing the production of narcotic drugs to the amounts needed for medical and scientific purposes.

Paris Medicine Pays 100 Percent for Quarter

The Paris Medicine Company, manufacturer of proprietary medicines, St. Louis, has issued its first quarterly report for 1933, showing sales of $641,997.25, which compared with $564,016.27 reported for the same period of 1932. This was an increase of $77,980.98, or 13.8 percent. The board of directors during the quarter declared a cash dividend of 100 percent to stockholders of record.

For the nine months' period ended March 31, the sales amounted to $2,208,980, which compared with $1,877,488 for the corresponding period in the previous year. This was an increase of $331,492, or 17.6 percent. Profits for the period ended March 31, 1933, were $511,928.21, after interest, depreciation, taxes, foreign exchange losses and other deductions and charges. This compared with $394,840 for the period ended March 31, 1932, being an increase of $117,088.21, or 29⅔ percent.

For the year ended December 31, 1932, the Paris Medicine Company reported a net profit of $636,547.70, after interest, depreciation, taxes, foreign exchange losses and other charges and deductions. This was equal to $636.55 per capital share and it compared with a net profit of $435,756.06, or $435.75 per capital share, for the year ended December 31, 1931. The company's balance sheet as of December 31, 1932, showed a ratio of 10 to 1 of current assets as to current liabilities.

Obituaries

A. M. Comey

Arthur Messinger Comey, retired chemist, died April 6 at his home, "Havenhurst", in Cambridge, Mass., after several months of severe invalidism. He was born November 10, 1861, in Boston, graduated from Harvard College in 1882, studied in Germany, and won the degree of doctor of philosophy from the University of Heidelberg. He was three years an instructor at Harvard and four years a professor at Tufts College, and then became a consulting chemist. In 1906, he became director of the E. I. du Pont de Nemours & Co. laboratory for research in high explosives, at Chester, Pa., and had charge of extensive and rapid development there until he retired in 1921. Since then, he had resided in Cambridge and had his summer home at Mount Chocorua, N. H. He had traveled much in company with his wife, who died in 1931.

He was a member of many scientific and technical societies, and had been an officer of some of them. He had been chairman of the National Research Council's sub-committee on explosives, and was a fellow of the American Academy of Arts and Sciences. He had written extensively on scientific topics, his principal work being the Dictionary of Chemical Solubilities, published in 1896 with a second edition in 1921, and long rated as a standard reference book. A son, Dr. Arthur C. Comey, professor of city planning, in Harvard University, survives. The funeral was held April 8 and burial was at Foxboro, Mass.

Mr. Comey left an estate estimated at $820,000. His will was filed April 13 in the Middlesex county probate court at East Cambridge. To his son, Arthur Comey, of Lincoln, Mass., he bequeathed $50,000. A trust fund of $25,000 is to be for the benefit of Mrs. Alice Baker, of Brookline, Mass., widow of Edward Baker, an associate of the testator, the principal of the fund to revert to the estate upon her death. The residue of the estate goes one-third to the son and one-third each to two grandchildren, Katherine Comey and Richard J. Comey. These funds for the grandchildren will be held in trust for their benefit until they reach the age of thirty-five years, when they are to receive the principals.

A. M. Ingram

A. M. Ingram, vice-president and production manager for Cooperative Great Lakes Fertilizer Mills, Inc., Baltimore, died suddenly at his home April 8. Mr. Ingram's health had not been good for some time. He was fifty-five years old, was born in Montgomery, Ala., and came to Baltimore about twenty-two years ago. Mr. Ingram superintended the running of the plant with the exception of a short interval. He was also something of an inventor, his car for the transportation of fertilizers being in use by many concerns, and he turned out various other pieces of factory equipment which proved their utility. He was widely known in the trade and made numerous friends. His wife, a son and two daughters survive. The funeral took place on Tuesday, April 11.

Waldo Lincoln, from 1873 to 1894 engaged in the manufacture of chemicals at Worcester, Mass., and since then active in banking circles of his home city, died April 7 at his home in Worcester. He was eighty-three years old, a native of Worcester, graduated from Harvard College at the age of twenty-one and was a member of the Harvard and Tavern clubs of Boston. He was a student of history and belonged to numerous historical societies. In 1907 he succeeded Rev. Dr. Edward Everett Hale as president of the American Antiquarian Society, of Worcester, and when he retired in 1927 his successor was President Calvin Coolidge.

Charles C. Aler, founder and president of the C. C. Aler Company, wholesale dealer in paints and varnishes, Cincinnati, died April 8 at his home in Walnut Hills, a suburb of Cincinnati. He was seventy-two years old and was a native of Adams Mills, Ohio. He had been in ill health for the last five years. His wife, one son and three daughters survive him.

Dye Imports Smaller In March This Year

Three-Month Total Also Shows Decline—Swiss Share Again Increases

WASHINGTON, Apr. 12, 1933.

Imports of synthetic dyes into the United States in March totaled 267,890 pounds, valued at $257,626, according to information compiled by the United States Tariff Commission and the Bureau of Foreign and Domestic Commerce. This total compares with 482,545 pounds, valued at $410,865, imported in March, 1932.

Imports of synthetic aromatics in March were smaller than those in March, 1932. Imports of color lakes were also smaller this year; but imports of other fine coaltar products were larger in volume, totaling 177,781 pounds, valued at $52,090, compared with 87,479 pounds, valued at $63,690, imported in March, 1932.

Comparative data on the various imports follow:—

Imports of Synthetic Dyes

	1933 Pounds.	1933 Value.	1932 Pounds.	1932 Value.
January ..	314,878	$311,640	297,266	$259,558
February..	365,144	369,829	429,298	367,154
March ...	267,890	257,626	482,545	410,865
Totals ..	947,912	$939,095	1,209,109	$1,037,577

Countries of Origin of Dyes

	—Percentages— March. 1933.	1932.
Germany	56.73	71.76
Switzerland	40.60	25.35
England	2.51	1.58
All other	.16	1.31

Dye Imports by Ports

	—March, 1933— Pounds.	Value.
New York	263,850	$253,607
Boston	4,040	4,019

Leading Dyes in March Imports

	Pounds.
Vat golden yellow GK double paste (single strength)	34,000
Ciba brown G paste	9,083
Indigosol O4B	6,173
Vat printing black B paste	5,500
Vat khaki GG paste	5,250

Imports of Aromatic Chemicals

	1933 Pounds.	1933 Value.	1932 Pounds.	1932 Value.
January ..	2,744	$4,060	2,410	$2,851
February..	3,153	2,899	7,006	20,520
March ...	6,346	11,288	8,632	17,849
Totals ..	12,243	$18,247	18,048	$41,220

Imports of Medicinals, Photographic Developers, Intermediates, and Other Coaltar Products

	1933 Pounds.	1933 Value.	1932 Pounds.	1932 Value.
January ..	35,087	$40,480	28,622	$26,401
February..	137,144	97,944	108,219	80,715
March ...	177,781	52,090	87,479	63,690
Totals ..	370,012	$190,514	234,320	$170,806

Leading Items in March Imports

	Pounds.
Cresylic acid	105,404
Diazo salt G	6,032
Parachlorometacresol	5,049
Fast red KB base	4,500
Methylanone, pure	4,491
Aminobenzolsulphonyl compound of benzidin sulphonate (ammonium salt)	3,128
Protectol	3,003

Imports of Color Lakes

	—Pounds— 1933.	1932.
January	391	1,090
February	10	842
March	1,834	2,707
Totals	2,235	4,639

Coaltar Products in Bond

	—Pounds— Dyes and colors.	Intermediates.
August 31, 1932	1,036,243	952,801
September 30, 1932	1,031,452	914,123
October 31, 1932	1,004,489	847,077
November 30, 1932	1,066,457	858,793
December 31, 1932	1,173,247	984,868
January 31, 1933	1,147,434	953,842

Black Bill to Shorten Workweek Reconsidered

The Black bill for a thirty-hour workweek is being reconsidered by the senate which recently passed the measure. The bill would prohibit for two years interstate commerce in domestic manufactured goods (with certain exceptions), in the production of which a workman is employed more than five days in any week or more than six hours in any day. The senate is reconsidering the bill with the purpose of applying it to imported goods.

The bill exempts the production of milk and its byproducts from the thirty-hour-week restriction. It also exempts cannery and other operations on fish, seafood, fruits, or vegetables of a perishable character.

Provision is made for the exemption by the Secretary of Labor of manufacturing operations, in connection with which special conditions make it necessary for any person to work more time than that specified.

The bill is being ardently supported by the president of the American Federation of Labor as necessary for employment improvement because voluntary share-the-work action has not proved adequate. The National Association of Manufacturers opposes the measure as unconstitutional, costly to administer, and unwarrantedly restrictive of business. The association holds that the progress already made in the share-the-work movement is evidence that unemployment relief can be voluntarily accomplished.

Food and Drugs Law Revision Plan Discussed with President Roosevelt

Department of Agriculture Officials Seek Support For Proposed Control of Advertising and Selling—Bill Being Drafted

WASHINGTON, Apr. 13, 1933.

Drastic revision of the food and drugs act is proposed in a Department of Agriculture program presented to President Roosevelt this week. As a result of this move, details of the plan are being revised and it will be laid before the President again in the near future.

The President considered the proposal to be not of major or emergency importance and not worthy of a special message to Congress at this time, but he indicated an interest in the general purposes of the proposal and suggested that certain aspects be given further study and the matter brought back to him at a later date.

Henry A. Wallace, Secretary of Agriculture; Rexford G. Tugwell, assistant secretary, and Walter G. Campbell, chief of the food and drug administration, spent an hour with the President, Monday, outlinging their proposal to rewrite the entire food and drugs act so as to give the Federal government practically complete control over the advertising and sale of foods, drugs, cosmetics, health appliances, and related merchandise.

Advertising Control Questioned

The proposed control over advertising is one of the most controversial features of the plan, and it is understood that this was questioned by President Roosevelt. The power of propriety of the Federal government's attempting to censor advertising will be criticized severely when public hearings are held on the proposed legislation.

Officials of the Food and Drug Administration, however, assert they do not want censorship in the ordinary meaning of the term, declaring that their only purpose is to make it illegal for a manufacturer to make false or fraudulent statements in newspaper, radio, or other advertising. Under the present law, statements on the label or in literature accompanying the package must be truthful, and final determination of this point rests with the courts. In actual practice, however, a manufacturer usually submits proposed new labels or circulars to the Department of Agriculture for comment, and if he does not wish to accept the department's suggestions for changes, he takes the risk of standing court action sooner or later. The drug trade insists that this practically amounts to a censorship and that the practice would work the same if applied to advertising.

Enforcement officials wish to make the advertising medium—newspaper, radio station, or billboard owner—jointly liable with the manufacturer of the product for the truthfulness of advertising statements. To do otherwise, they say, would permit a manufacturer of a fraudulent preparation to do business for many months during court proceedings and then to change his firm name and brand slightly and continue the business. To offset this risk to advertising mediums they propose to establish a free reference bureau or clearing house which would inform publishers and others as to what advertisements were within and without the law. They declare that many publishers and radio station managers have expressed their willingness to eliminate objectionable advertising of certain food and drug products but have been powerless to do so because of the lack of any authority to determine the propriety of such advertising and to make such determination universal.

Hearings Are Expected

When details of the proposed new law are completed to the satisfaction of the enforcement officers it is expected that the draft will be made public and interested groups from the affected industries and the general public will be given an opportunity to present their views before the measure is laid before Congress. This will be in the very near future unless present plans are altered, as the department is pretty well agreed on its idea of a "bigger and better" food and drugs law.

Strengthening the law in many respects has been recommended to Congress for many years by enforcement officials with practically no response, but as soon as Assistant Secretary Tugwell assumed his post he expressed an interest in the matter. As a result the many proposed amendments have been dropped in favor of a general rewriting of the law to close its loopholes and broaden its scope. Both Secretary Wallace and President Roosevelt have shown sympathy with the plan, and while both are presently concerned with farm relief and other major emergency matters, it is not unlikely that the plan will receive official endorsement.

Chemical Progress in Synthetic Resins

By H. L. Bender

Research Chemist, the Bakelite Corporation

(Excerpts from a paper presented April 14 before the American section of the Societe de Chimie Industrielle. The complete paper with a wealth of informative technical data, including structural chemical formulas of synthetic resinous compounds, will be published in the journal of the parent society.)

The start of the synthetic resin industry was Baekeland's method of molding phenol-formaldehyde condensation products which were later called phenolic resinoids. In this field phenols and aldehydes react to give seven different classes of products four of which, crystalline oxybenzyl alcohols and dioxydiphenylmethanes, permanently fusible resins, and a miscellaneous group of resins which may be hardened to a non-melting state, were known prior to Baekeland's work. He disclosed how the known products could be controlled and how three new classes of resinoids, the A, B, and C types, could be produced and controlled.

For many uses, shellac has been displaced in the last twenty years by the phenolic resins; but the problem of shellac substitutes has not been fully met. The problems of the oil varnish field have recently been met in two different ways. Albert first made the phenolic resins useful in drying oil mixtures by making use of mutual solvents, like rosin, which are natural high acid resins. More recently Turkington and his coworkers have made phenolic resins which are oil-soluble and which also exert a beneficial influence on the drying of oils and on the properties of the resulting oil-resin films. Choice of special homologs of phenol and of formaldehyde give many resins which dissolve in drying oils. Some of these oil-soluble resins offer valueable properties for oil-resin varnishes.

While choice of homologs of phenol and of formaldehyde, of kind and proportion of catalysts, and of method of handling has resulted in vast improvement and has greatly broadened the phenolic resin field, yet the foundations of the hot melting resinoid industry are still the same principles as disclosed by Baekeland and also are still the same first raw materials, namely phenol, with its simple homologs, and formaldehyde.

Thermoplastic Resins

Resinous adhesive synthetic substances which continue to flow under heat are permanently thermoplastic, and commonly are designated as "thermoplastic" resins. Much recent progress is to be noted in this field.

(Continued on page 38)

H. L. Bender

Muscle Shoals Plan Agreed on by Congress

President Sends Message Telling Action Desired—Bills Are Introduced

WASHINGTON, Apr. 13, 1933.

Final disposition of the government's electric and nitrate plants at Muscle Shoals, Alabama, seemed near this week as the President and both houses of Congress agreed in principal to a plan for the first time since the end of the armistice made them no longer needed for national defense.

After a series of conferences with Congressional leaders President Roosevelt sent a special message outlining legislation he favored, and bills to enact this program were promptly introduced. The Senate bill was immediately reported back by the committee on agriculture, while the House committee on military affairs planned to hold only brief hearings before the bill goes to the floor.

Fertilizer production, the chief bone of contention for a decade and a half of legislative effort, is relegated to a place of minor importance in the Senate bill, which is sponsored by Senator George W. Norris, of Nebraska, long an advocate of government operation of power projects. The House bill, introduced jointly by Representatives John J. McSwain of South Carolina, and Edward B. Almon and Lister Hill of Alabama, contains provisions for the mass production and cheap sale of fertilizer which the fertilizer industry has always considered its death sentence, although even this proposal would not put the government so deeply into the fertilizer business as some previous plans adopted by the House.

Fertilizer Section

It is this fertilizer section which doubtless will entail the greatest controversy. Senator Norris believes that the fertilizer plants are virtually obsolete and that the project should be operated as an electric power business with fertilizer experiments as a sideline, while the Southern Representatives feel that agriculture requires the operation of a large-scale, low-cost nitrate plant which they insist exists at Muscle Shoals.

The President appears to be keeping hands off this fertilizer question, for his message did not mention the word. He visualized this wartime white elephant as becoming a useful part of a larger plan for the development of the entire Tennessee valley for navigation, flood control, reforestation, power production, and the development of natural resources. In such a picture any specific use of the Muscle Shoals plants would be but a small part, although

(Continued on page 37)

Nitrogen Producers Will Confer in N.Y. April 24

A nitrogen conference among representatives of Chilean, British, German and United States producers will be held in this city April 24. Details and the identities of the conferees are being held in close secrecy, but it is known that Osvaldo de Castro, who is attached to the Chilean government's Cosach liquidation commission, left Chile enroute to New York, April 13. It is understood that he will meet Paul Wirtz, Cosach's European representative, and they will be the Chilean representatives at the conference.

An official of the German I. G. Farbenindustrie is also on his way to New York, but his identity could not be learned. It was definitely established, however, that the I. G. representative would not be Dr. Carl Bosch or any of the other internationally known men connected with the German trust. Imperial Chemical Industries, Ltd., powerful British cartel, will be represented by either one or two men, but they could not be identified at the local office of the company. The British delegation has not yet left London. Although it could not be confirmed, it was believed that the Allied Chemical & Dye Corporation would also be represented at the meeting.

Whether the conference will discuss market conditions in the United States or will limit its discussion to world markets outside this country was also secret. The question has been raised of the legality of holding such a meeting in New York, but the selection of this city as a meeting place is logical because the Allied Chemical & Dye Corporation, which has been competing severely in foreign markets, has its headquarters in New York, and also because New York bankers practically own all of the Chilean nitrate of soda supplies in this country and have, as well, heavy financial investments in the Chilean nitrate industry. It is considered not unlikely that foreign nitrate producers would like to temper the severe competition of the Allied Chemical & Dye Corporation in nitrate of soda in Europe and the Far East.

Where You Can Sell

Complete and Convenient Reference Guide for Sales Executives and Advertisers to Manufacturing Consumers of Chemicals, Drugs, Oils, and Related Products

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Three Hundred Twenty-eighth Recapitulative Instalment

(Parenthetical references are to the number of a patent in the United States or other countries, as designated)

Isoallyl Alphacrotonate

(Alfacrotonato de Isoallil, Alfacrotonato d'Isoallile, Alphacrotonate d'Isoallyle, Alphacrotonate Isoallylique, Alphacrotonsaureisallylester, Alphacrotonsauresisoallyl, Isoallylalphacrotonat)

Ceramics

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for decorating and protecting ceramic ware

Chemical

Starting point in making various derivatives

Electrical

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for insulating wire and in making electrical apparatus and equipment

Glass

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used in the manufacture of non-scatterable glass and for the decoration and protection of glassware

Glues and Adhesives

Ingredient (Brit. 321518) of—
Adhesive preparations containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, and also rubber

Leather

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used in the production of artificial leather and for the decoration and protection of leather goods

Metallurgical

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for the decoration and protection of metallic ware

Miscellaneous

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for insulating purposes and also for decorating and protecting various compositions of matter

Paint and Varnish

Ingredient (Brit. 321518) of—
Lacquers, paints, varnishes, dopes, and enamels containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, together with rubber

Paper

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used in the production of coated papers and also for the protection and decoration of paper and pulp products

Plastics

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber

Rubber

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for the production of decorative and protective coatings on rubber goods

Stone

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for the production of decorative and protective coatings on natural and artificial stone

Textile

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for softening yarns and fabrics
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used in the manufacture of coated fabrics

Woodworking

Ingredient (Brit. 321518) of—
Compositions, containing cellulose acetate, nitrocellulose, or other esters or ethers of cellulose, as well as rubber, used for the decoration and protection of woodwork

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Oleic Amide

(Amide Oleique, Amido de Oleico, Amido d'Oleico, Oleinsaureamid)

Chemical

Dispersing agent (Brit. 343899) in making—
Emulsions of hydrocarbons of various groups, including the aromatic and aliphatic series
Emulsions of various chemicals
Terpene emulsions
Starting point in making—
Cleansing, dispersing, emulsifying, scouring, washing and wetting agents
Various derivatives

Disinfectant

Dispersing agent in making—
Emulsified disinfectants containing various oils and chemicals
Emulsified germicidal and deodorant compositions

Dye

Dispersing agent (Brit. 343899) in making
Dispersions of various dyestuffs and color lakes

Fats and Oils

Dispersing agent (Brit. 343899) in making—
Boring oils
Drilling oils
Greasing compositions
Lubricating compositions containing various animal and vegetable fats and oils
Solvents for fats and oils
Stabilized emulsions of various animal and vegetable fats and oils
Wetting, washing, emulsifying, and dispersing compositions containing animal and vegetable fats and oils
Wire-drawing oils in emulsified form

Glues and Adhesives

Dispersing agent in making—
Emulsified glue and adhesive compositions

Ink

Dispersing agent (Brit. 343899) in making:—
Printing inks
Writing inks

Insecticide

Dispersing agent (Brit. 343899) in making—
Insecticidal compositions in emulsified form

Leather

Dispersing agent (Brit. 343899) in making—
Emulsified leather-dressing compositions
Emulsified fat-liquoring baths
Emulsified soaking compositions
Emulsified waterproofing compositions

Miscellaneous

Dispersing agent (Brit. 343899) in making—
Automobile polishes
Cleansing compositions for various purposes
Emulsified compositions for use in scouring, washing, and dispersing
Furniture polishes
Metal polishes
Various degreasing and greasing compositions in emulsified form
Waterproofing compositions

Paint and Varnish

Dispersing agent (Brit. 343899) in making—
Asphaltic paints and varnishes
Emulsified paints and varnishes
Shellac emulsions
Pigment emulsions
Waterproofing compositions in emulsified form

Paper

Dispersing agent (Brit. 343899) in making—
Sizing compositions in emulsified form
Waterproofing compositions in emulsified form
Waxing compositions in emulsified form

Perfume

Dispersing agent (Brit. 343899) in making—
Cosmetic creams
Latherless shaving creams
Lotions
Shampoos
Various emulsified cosmetics

Petroleum

Dispersing agent (Brit. 343899) in making—
Emulsified cutting oils
Kerosene emulsions
Naphtha emulsions
Soluble greases
Soluble oils
Stabilized emulsions containing petroleum or petroleum distillates

Resins and Waxes

Dispersing agent (Brit. 343899) in making—
Emulsions of natural and artificial resins
Emulsions of natural and artificial waxes

Rubber

Dispersing agent (Brit. 343899) in making—
Rubber emulsions and compositions

Soap

Dispersing agent (Brit. 343899) in making—
Emulsions of ordinary soap and soaps of the alkaline earth metals
Hand-cleansing compositions
Shaving creams

Textile

Dyeing

Dispersing agent (Brit. 343899) in making—
Dye baths in emulsified form

Finishing

Dispersing agent (Brit. 343899) in making—
Emulsified coating compositions
Emulsified scouring compositions
Emulsified sizing compositions
Emulsified washing compositions containing soaps

Manufacturing

Dispersing agent (Brit. 343899) in making—
Emulsified baths for carbonization of wool
Emulsified degreasing baths
Emulsified degumming baths for raw silk
Emulsified fulling baths
Emulsified kier boiling liquors for cotton
Emulsified mercerizing baths
Emulsified silk-soaking baths
Emulsified oiling preparations
Emulsified wool-washing baths

Printing

Dispersing agent (Brit. 343899) in making—
Emulsified printing pastes

2:3-Oxynaphthoic Betanaphthylamide

(Betanaftilamido de 2:3-Oxinaftoico, Betanaftileamido di 2:3-Ossinaftoico, Betanaphthylamide 2:3-Oxynaphthoique, 2:3-Oxynaphtoebetanaphtylamid)

Chemical

Starting point in making—
Intermediates

Dye

Starting point in making various dyestuffs

Textile

Coupling agent (Brit. 319247) in dyeing yarns and fabrics with the aid of—
Allyl 5-bromo-2-amino-1-benzoate
Amyl 5-bromo-2-amino-1-benzoate
Butyl 5-bromo-2-amino-1-benzoate
Ethyl 5-bromo-2-amino-1-benzoate
Heptyl 5-bromo-2-amino-1-benzoate
Hexyl 5-bromo-2-amino-1-benzoate
Isoallyl 5-bromo-2-amino-1-benzoate
Isoamyl 5-bromo-2-amino-1-benzoate
Isobutyl 5-bromo-2-amino-1-benzoate
Isopropyl 5-bromo-2-amino-1-benzoate
Methyl 5-bromo-2-amino-1-benzoate
Pentyl 5-bromo-2-amino-1-benzoate
Propyl 5-bromo-2-amino-1-benzoate
Various alkyl esters or 5-chloro-2-amino-1-benzoic acid

Propyl Acetate, Normal

(Acetate de n-Propil, Acetate di n-Propile, Acetate de n-Propyle, Acetate n-Propylique, Æthansaurepropylester, Æthansaurespropyl, Essigsaurepropylester, Essigsaurespropyl, Etanato de Propil, Etanato di Propile, Metancarbonato de Propil, Metanecarbonato di Propile, Methancarbonsaurespropylester, Methancarbonsaurespropyl, Methanecarbone de Propyle, Propyl-n-acetate, Propyl-n-azetat, Propylæthanat, Propylmethancarboxylat)

Food

Ingredient of—
Fruit essences

Perfume

Ingredient of—
Cosmetics and pomades
Perfume preparations

Soap

Perfume in—
Toilet soaps

Polystyrene

(Polistiren, Polistirene, Polystyren)

Chemical

Starting point in making—
Intermediates and other derivatives

Miscellaneous

Ingredient (Brit. 367126) of—
Compositions for impregnating and stiffening felt

Heavy Chemicals

Further Fractional Advance for Tin Crystals--Sharp Reduction in Red Potash Prussiate--Yellow Steady--Carbon Tetrachloride Lower--Imported Saltcake Off

A marginal improvement was evident in the general demand for industrial chemicals during the week just closed. Slight pickup in the buying by the heavier industrial units and certain lighter trades, together with a broadening in seasonal demand for a number of insecticides and other chemicals coming under seasonal influences offset the lowering of production schedules in the textile and tanning industries. Changes in the market included a fractional advance in tin crystals and a lowering of the prices for carbon tetrachloride, red potash prussiate, and imported saltcake.

It was generally conceded that demand for industrial chemicals last week reached proportions sufficient to give credence to the belief that the loss in business incurred by the declaration of a bank holiday early last month has been for the most part recovered. Sentiment in the market last week appeared strengthened, reflecting the gradual alleviation of unfavorable banking conditions in certain sections of the country. Particularly was improvement noted in the buying of some insecticides. Producers of blue vitriol reported that the orders on the books slated for shipment through the current month and the early part of May compared most favorably with the volume transacted in the corresponding period last year. Lead arsenate was in fair demand, with no change noted in the open quotations. White arsenic was active. And a slight broadening was noted in the queries reaching the market for soda chlorate and calcium chloride regarding future shipments.

Extended advance in the value for tin crystals reflected a further rise in the price for the basic metal. The current schedule for tin crystals will remain in effect until April 21. Tin tetrachloride was also higher, the value of which is based on the daily quotation for Straits tin. Tin oxide and soda stannate were slightly firmer. Lowering of the prices for carbon tetrachloride was announced April 12, being primarily due to the keen competitive condition to which the market has been subjected recently. The same reason could be advanced for the lowering of the prices for red potash prussiate. Yellow prussiate continued unchanged, with a firm tone in evidence. Decline in the price of imported saltcake was due mainly to the rather slow condition of demand lately.

A slightly better demand was noted for sulphuric acid last week, but the buying was not of a consequence equivalent to bringing about a change in the quotations. Alkalies were in fairly good demand, with the glass trade affording a good consumption channel because of the demand for bottles by the brewery industry. Anhydrous ammonia was also active. Automobile industry continued to order out in a cautious manner, with the result that the call coming from the plating industry and kindred trades affected by activities in the automobile industry were following a similar procedure in the buying of chemicals. Steel industry was operating on a higher level, but copperas held firm. Seasonal improvement was noted in a number of chemicals utilized for water purification purposes.

Alums.—The market for the ammonia alums continued to make a good showing from the demand standpoint, and prices were steady. Business in the sulphate article was highly irregular, but prices were well maintained throughout the week.

Ammonia Anhydrous.—A broader inquiry was noted in this market last week, reflecting the release of seasonal shipments as well as the betterment brought about by the revival of activities in the brewery trade. Prices for tanks and cylinders remained unchanged.

Ammonia Aqua.—An irregular call was disclosed in this market last week, with the consuming industries, especially the textile industry, holding off from purchasing sizable quantities until after the Easter holidays. But prices were well sustained.

Ammonia Phosphate.—A good demand was reported here, but consumers of the technical material were showing care in limiting needs to actual wants, but prices held steady at 8½c. to 11½c. per pound, according to quantity.

Antimony.—Request for the metal continued to lag in the local market, with sellers quoting the market nominally at 5.95c. per pound. Primary market cables indicated that a steady tone ruled the dealings there. No change was noted in the oxide and needle commodities, with the demand termed only fair.

Barium Salts.—The market for the chloride material noted a slightly firmer tendency, with the call coming from the color and tanning trades, and prices were unchanged. Activity in the market for the peroxide material was limited to comparatively small lots, but prices held steady. No change was noted in the other salts.

Bleaching Powder.—Further betterment was shown here again last week, with leading sellers indicating the price position of the market was firm, and prices were without change.

Blue Vitriol.—Leading sellers reported that a better request was noted here from the agricultural districts, tending to offset the slowing down in the call from other consuming channels. In fact, it was reported in some quarters that the shipments slated against contracts for the balance of the month would reach an aggregate comparing favorably with the movement experienced in the same month a year ago. And the price position of the market was firm.

Calcium Acetate.—Seasonal curtailment in the production of lime acetate was noted last week, with the result that the presence of a fair demand in the market last week found the price in a decidedly firm position.

Calcium Phosphate.—Pharmaceutical manufacturers were ordering out fair-sized shipments of this material, and leading sellers continued to quote the market at 7½c. to 8¾c. per pound.

Calcium Chloride.—This market experienced a slightly better inquiry during the week just closed, and sellers here were naming the quotations in effect in the previous week. A gradual seasonal improvement is anticipated in this market.

Carbon Tetrachloride.—Producers reduced the car-lot quotation 1c. per pound and the less than car-lot shipments ½c. per pound, with the new schedule going into effect as of April 11. The new schedule follows:—Commercial, car lot, 5¼c. per pound; less car lots, 6c. to 8½c. per pound, according to quantity. Chemically pure, car lots, 7¾c. per pound; less car lots, 8½c. to 11c. per pound.

Chlorine.—Seasonal slackening in demand from the textile industry was offset to an extent by a better inquiry from consumers utilizing material for water purification purposes, and producers reported the market presented a firm undertone, with both the tank-car quotations and cylinder prices unchanged.

Copper.—Domestic dealings were inactive, with some copper reported available at 5⅜c. per pound, delivered Connecticut Valley base. However, some quarters continue to name 5½c. per pound nominally. It was reported late in the week that an offer of copper abroad at 5.25c. per pound, c.i.f. European ports, remained unplaced. Nothing definite was forthcoming last week relative to the talk of shutting down copper mines in the United States in an effort to strengthen the price position of the metal.

Copper Salts.—A fairly good call was noted in the market from the agricultural districts for the carbonate material, and prices were about the

Price Changes

Prices were changed during the past week as follows:—

Advanced

Tin crystals, ½c. per lb.

Reduced

Carbon tetrachloride, car lots, 1c. per lb.
less than car lots, ½c. per lb.
Potash Prussiate, red, 3½c. per lb.
Saltcake, imported, 50c. per ton

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
152.2	152.2	152.2	151.0

Index numbers compiled from twelve typical acids on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
99.2	99.2	99.2	99.6

Market news that may have developed after this report was sent to press will be found on page 2.

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 5

BARIUM CHLORIDE
BARIUM REDUCTION CORPORATION, CHARLESTON, W. VA.

ESTABLISHED 1815
ARNOLD, HOFFMAN & CO., INC.
William H. Hayward, *Pres.* Edward M. Johnson, *Vice-Pres. and Treas.* Joseph A. Bryan, *Vice-Pres.*
PROVIDENCE NEW YORK BOSTON PHILADELPHIA CHARLOTTE
HEAVY CHEMICALS
Sole Agents for BELLE ALKALI CO., BELLE, W. VA.
Manufacturers of
LIQUID CHLORINE BLEACHING POWDER
CAUSTIC SODA, Solid and Flaked

Persulphate of Ammonia
Joseph Turner & Co.
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same as the previous week. There was little to report in the market for chloride and cyanide articles, with the latter material changing hands at 39c. to 44c. per pound, according to quantity.

Copperas.—The market continued to maintain a firm undertone, due particularly to the statistical position of the market rather than an improvement in demand. Prices were unaltered. Steel mill operations advanced to 19½ percent of capacity from 16½ percent in the previous week.

Feldspar.—Demand here continued in the doldrums throughout the course of the period under review, with the ceramic industry limiting purchases to nearby wants and prices held unchanged at $15 to $21 per ton for the powdered material.

Lead Acetate.—Character of the call indicated that buyers were adhering to the hand-to-mouth plan, but a fairly good volume was moved for the week and prices held steady at previously established levels.

Magnesia Silicofluoride.—This situation showed little variation from the recent week, what with the building trade continuing in the dildrums, but prices held unchanged at 8¾c. to 9½c. per pound, according to quantity.

Nickel Salt.—Demand here showed little improvement last week, with the platers holding down shipments to actual needs, but prices held unchanged. There was little to report in the market for the chloride article, and prices for the oxide item remained unchanged.

Potash Carbonate.—Shipments here held up fairly well considering general business conditions, and sellers termed the price position as firm at the levels in force for some time past.

Potash Caustic.—Soap manufacturers were taking substantial shipments of this product, with a fair demand coming from other directions also, and the firm tone governed the dealings.

Potash Chlorate.—Match manufacturing companies were ordering out against contracts in a consistent manner last week, but buying in other directions continued slow. Prices appeared barely steady.

Potash Prussiate.—Sellers of the red material reduced quotations 3½c. per pound, with the new schedule listing the quotations from 32½c. to 34½c. per pound, according to quantity. Lower prices could be attributed to keen character of the competition in this market recently.

Saltcake.—The market for the imported item was 50c. per ton lower at $12.50 per ton, on a c.i.f. basis. Demand from the paper mills was considered fair. Buying by the glass trade continued to hold up well, with the good call from the glass trade attributed to the revival of activities in the brewery industry.

Soda Ash.—Leading producers reported that the call was encouraging here during the week, with the shipments in the first half of April showing a slight improvement over the corresponding period a month ago. And prices held unchanged.

Soda Caustic.—Although some slowing down was noted in the shipments moving to certain sections in the textile industry as a result of seasonal curtailments, producers reported that a good call was in evidence from other directions. And a steady tone governed the dealings, with no change in quotations.

Soda Chlorate.—Some fair-sized inquiries reached the market from the agricultural districts last week, and sellers here were quoting the prices in force previously, with a steady tone noted. February amounted to 11,023 pounds, with the entire amount coming from France.

Soda Cyanide.—Nothing of outstanding importance occurred here, with regular buyers supplying a fair call, and prices were unchanged. Of the February exports of 21,446 pounds, Canada consumed 2,221 pounds; Nicaragua, 2,025 pounds; Salvador, 1,680 pounds; Bolivia, 10,976 pounds; Colombia, 4,144 pounds, and Hongkong, 400 pounds. Imports amounted to 931,539 pounds, with 262,954 pounds coming from Germany, 640,285 pounds from Canada, and France shipped 28,300 pounds.

Soda Metasilicate.—Laundry trade and other consumers were coming into the market for representative shipments of this article, and sellers reported that April shipments were running slightly ahead of the March turnover, with prices holding steady.

Soda Phosphate. — Further curtailment in purchases was noted in the market for the di-basic material, reflecting the general slowing down in the nearby textile mills, but prices were well sustained. Demand for the tri-basic came from divers directions, and prices were in line with previous quotations.

Soda Silicofluoride. — A firmer tone was in evidence here, with a fairly good demand registered. No change in prices developed. Of the 254,873 pounds imported in February, the Netherlands consigned 187,743 pounds, Germany 56,107 pounds, and Denmark 11,023 pounds.

Soda Sulphide.—Business here last week could be considered good, with prices holding firm. Of the 179,002 pounds imported in February, Belgium shipped 22,685 pounds, Germany 144,855 pounds, and United Kingdom 11,462 pounds.

Tin Salts. — Sellers of tin crystals advanced the quotation ½c. per pound to 25½c. per pound for the barrel shipments and 26c. per pound for keg shipments. Higher quotations reflected the advance in the metal market in the earlier part of the week. This new

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 5

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schedule will remain in effect until April 21. Basic metal was quoted at 25.60c. per pound. Tin oxide was unchanged.

Zinc Salts.—There was little to report in this market aside from a fairly good demand originating in the regular channels of consumption, and prices were steady on both the sulphate and sulphide commodities.

Acids

(See also under Coaltar Chemicals and Drug and Fine Chemicals.)

Business in the market for the various acids was concerned with small quantities for nearby requirements, and with a number of the textile units reducing production schedules with the fulfillment of the Easter orders, demand assumed a slower pace, with the decline in buying by the textile and tanning industries not entirely offset by the measure of improvement in certain heavier industrial units. Reports from Detroit indicated that further betterment could be expected in the automobile production schedules during the current month, but those consumers of chemicals were continuing to practice the hand-to-mouth policy. Likewise, platers and kindred trades affected by automobile production were adhering to a cautious plan in the ordering out of supplies. Lactic acid was in dull demand and buying of acetic acid noted further diminuition. Hydrocyanic acid ruled unchanged, with sellers looking for a good call this year from the agricultural districts. Silverware trade ordered small quantities of hydrofluoric acid, and jobbing quantities supplied the call for tricloracetic acid.

Acetic.—Business transacted here indicated that a curtailment had been effected in certain consuming industries, but prices continued to hold at the levels in vogue previously.

Battery.—There was a fair demand noted for this product, with the market holding firmly at $1.60 to $3.50 per 100 pounds, according to quantity.

Boric.—Orders came into this market at a good pace last week, and while the regular buyers were confining withdrawals to nearby wants, sellers reported a satisfactory volume was moved for the week. Prices held steady.

Chromic.—Platers continued to practice a cautious policy in the buying of material last week, and the market appeared slow at times, but leading sellers were naming prices in force for some weeks past.

Hydrocyanic. — Demand here continued good last week, with the material utilized for fumigaton purposes. Sellers were anticipating a good seasonal call from the agricultural districts, and prices were without change.

Hydrofluoric. — Buying here was spotty, and what orders were transacted concerned small quantities, but no change in quotations was uncovered.

Lactic.—There was a slight falling off in the volume of business in this market last week, due to the seasonal tapering off of production schedules in certain consuming industries, but prices were without change.

Muriatic.—Throughout the week it was quite evident that textile consumers were giving consideration to inventories because of the near approach of the off-season, but prices held firm, with a fair call coming from other directions.

Nitric.—Although no pickup was recorded in demand here last week, sellers reported that contract withdrawals were of a volume capable of giving the market a firm undercurrent and prices held unaltered.

Oxalic.—A firm tone was a prominent factor in the dealings here, with the fair call from other consuming quarters acting as a counteracting influence to the decline in buying by the textile trade, and prices were without change.

Sulphuric.—Although some improvement was noted in the buying by the heavier industrial units, this betterment was offset by a decline in the movement to the lighter trades as a result of the seasonal slowing down in operations, but leading producers here reported that prices were without change, with a firm tone in evidence. Steel mill operations last week moved forward to 19 percent of capacity from 16 percent in the previous week.

BALTIMORE, April 12.—Developments with regard to sulphuric acid during the last week were not sufficiently decided to bring any change of consequence in the situation, which continues to be distinguished by market quiet and by a curtailed production in accordance with the very modest needs of various consumers of acid, among them the manufacture of fertilizers. The outlook, however, is more encouraging, with the feeling in the trade distinctly better. Some signs of an expansion in steel output are discernible and there are other indications that sooner or later the acid business will register a definite upswing. For the present the quotations remain at $7.50 per ton for 60-degree acid, with 66-degree strength, $3 to $3.50 higher. Oleum remained stationary at the figures that have been mentioned for some time, with the production down to established lows.

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 5

Sulphuric Acid Output by Fertilizer Makers: February

Production of sulphuric acid by manufacturers of superphosphate in February was 99,699 tons, according to a report of the Bureau of Census based upon data received from 71 manufacturers operating 99 plants. This compared with 114,618 tons in January and 104,573 tons in February, 1932. Stocks on hand at the end of February were 103,482 tons, against 106,066 tons at the end of January, and 90,344 tons at the end of February last year. Details of production, consumption, and stocks on hand for February, a comparison with January and February last year, follow:—

	Short tons†					
	Feb.,‡ 1933.	Jan.,* 1933.	Feb., 1932.	January-February— 1933.	1932.	1931.
Production and purchases—						
Production by reporting establishments—						
Total	99,699	114,618	104,573	214,317	222,186	347,683
Northern district	57,744	69,174	67,938	126,918	141,574	205,156
Southern district	41,955	45,444	36,635	87,399	80,612	142,527
Purchased from fertilizer manufacturers—						
Total	10,625	13,794	8,795	24,419	24,660	¶.....
Northern district	3,821	7,548	3,086	11,369	11,653	¶.....
Southern district	6,804	6,246	5,709	13,050	13,007	¶.....
Purchased from non-fertilizer manufacturers—						
Total	9,388	15,002	8,934	24,390	23,488	94,838
Northern district	7,981	10,863	4,407	18,844	13,940	48,649
Southern district	1,407	4,139	4,527	5,546	9,548	46,189
Consumed in fertilizer manufacture, and shipments—						
Consumed by reporting establishments in production of fertilizer—						
Total	86,558	100,446	79,975	187,004	175,656	352,844
Northern district	40,274	52,707	41,623	92,981	95,879	191,104
Southern district	46,284	47,739	38,352	94,023	79,777	161,740
Shipments—						
To other than fertilizer manufacturers—						
Total	21,675	26,538	26,732	48,213	52,389	76,595
Northern district	19,074	24,060	22,198	43,134	42,353	65,578
Southern district	2,601	2,478	4,534	5,079	10,036	11,017
To fertilizer manufacturers—						
Total	14,063	14,641	19,133	28,704	46,983	¶.....
Northern district	9,604	9,424	13,247	19,028	32,609	¶.....
Southern district	4,459	5,217	5,886	9,676	14,374	¶.....
Stocks on hand—						
Total	103,482	106,066	90,344	.....	.....	.....
Northern district	81,108	80,514	66,995	.....	.....	.....
Southern district	22,374	25,552	23,349	.....	.....	.....

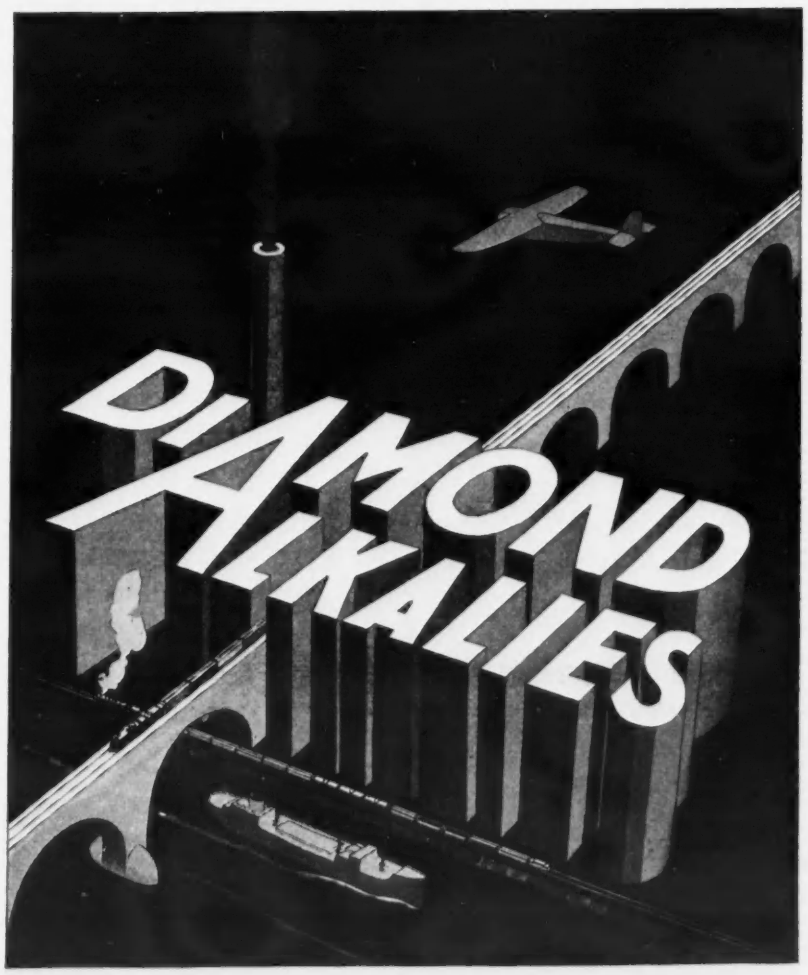
* Revised.
† Northern district, States north of Virginia-North Carolina line; southern district, States south of Virginia-North Carolina line.
‡ Preliminary.
¶ Data not available.

Trichloracetic. — Apparently buyers here were content to remain aloof from the market unless actual requirements so prompted their entrance into the market, for demand was slow, but prices were unchanged.

Insecticides

The market for the various fungicides and insecticides noted a fairly good seasonal demand again for lead arsenate, with the call for lime sulphur solution following an irregular trend. A slight betterment was noted in the buying of nicotine sulphate, and all prices remained unchanged, with the general tone barely steady to firm. Calcium arsenate moved through another off-season week. A good call was in evidence in the market for white arsenic. Government weekly weather report stated that planting of cotton was making normal progress in the Eastern portion of the belt. In the Central portion the soil remains entirely too wet, and seeding, normally begun at this time, is delayed, especially so in most places. In the Western belt, conditions were more favorable.

Arsenic.—There was little activity in the market for the red material, with sellers quoting about the same prices as recent weeks. Buying of the white article reached an encouraging total,



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and sellers here described the price undercurrent as steady.

Calcium Arsenate.—Demand here failed to show an improvement last week, but despite the off-seasonal dullness, sellers were adhering firmly to previous quotations.

Lead Arsenate.—Buying of this article continued to follow an irregular trend, with demand for export account continuing to lag, but leading sellers here reported no change in open quotations.

Lime Sulphur Solution.—This situation remained about the same as the previous week, with the call spotty and competition continuing keen, but a change in open quotations was lacking.

Nicotine Sulphate.—A slightly improved demand was reported here, and the market continued to be featured by a steady tone, with sellers asking previous values.

Garweg Returns to Europe

E. Garweg, manager of the Transatlantische Handel-Maatschappij, Hamburg, Germany which is represented in New York by the Philipp Bauer Company, Inc., importers and exporters of chemicals, has sailed for Europe after an extensive tour through the United States and Canada. Despite the depressed business conditions which he met on his trip, Mr. Garweg was reported as returning home with a distinct feeling that things are on the upgrade.

Chemical Transportation Regulations Are Revised

A number of important changes have been made by the Interstate Commerce Commission in the regulations for the transportation of explosives and other dangerous articles by rail freight and express.

Among the changes are the addition to the dangerous articles (freight) list of sludge acid, spent mixed acid, spent sulphuric acid, and thallium sulphate. Another change permits the packing for freight shipment of dry trinitrotoluene, ammonium picrate, picric acid, and tetryl in fiber drums of specification 21A.

Paragraphs 218 (d) and 219, applying to tankcars, have been amended with reference to closures and retests. A number of changes have been ordered with respect to container charts. In another amendment, original shippers of class B poisons are required to label containers in carload shipments as required for shipment in less than carloads, when such reshipments are to be made.

Regulations amended in the express schedules comprise such commodities as thallium sulphate, chlorates, bromates, nitrites, permanganates, wet nitrocellulose, wet nitrostarch, and wet nitroguanadin.

Revised specifications comprise metal drums, slack wooden barrels and kegs, and the closures and marking of such containers.

German Chemical Exports

German exports of heavy chemicals in 1932 to the United States were 58,182 tons, valued at nearly 9,800,000 marks, according to information received by the Department of Commerce from the trade commissioner at Berlin. Exports of these items to all countries totaled 359,707 tons.

Total exports and those to the United States of various chemicals were as follows:—

	Metric tons	
	Total	To U. S.
Antimony compounds	509	38
Arsenic acid and compounds	3,459	410
Bleaches and peroxides	26,016	628
Blue vitriol	9,820	603
Calcium chloride	16,053	3,152
Cryolite (synthetic) and aluminum compounds	30,895	1,026
Cyanides, soda and potash	4,677	1,072
Epsom salt	36,875	4,209
Lactic acid	1,531	255
Oxalic acid	3,486	145
Potash carbonate	12,224	2,989
caustic	30,688	2,253
chlorate and perchlorate	10,892	4,850
Soda chlorate	2,017	272
sulphate	160,411	34,625
Sulphides, soda and potash	5,210	590
Tartaric acid	3,034	610
Zinc salts	2,000	446

Imperial Chemical Income In 1932 Larger Than 1931

LONDON, April 4, 1933.

The report of Imperial Chemical industries, the great British chemical combine, for 1932 is of special interest in view of the substantial increase that took place in the earnings of the group, its net income rising by £1,320,782 to £4,729,072. It is stated by the board that, as before, the year's revenue contains nothing of an exceptional nature and relates solely to the year's operations and includes no sum from profits on the sale of investments. There was a definite increase in turnover compared with 1931.

While the companies controlled by the combine derived assistance from Britain's abandonment of the gold standard and the adoption of the Import Duties Act the satisfactory nature of the results was due quite as much to increased efficiency in production and marketing as to the extraneous developments mentioned.

The report contains a review of the conditions in the different industries in which the group operates. It is stated that the domestic sales of alkali products showed improvement; and in spite of less business from China the total volume of trade in export markets was somewhat better. In chlorine products and acids there was also an increase, and progress has been made with some of the newer developments.

The volume of sales of dyestuffs showed a marked improvement, both in home and export markets. The arrangement with the Continental makers referred to last year has operated smoothly and helped to stabilize prices both at home and abroad.

A further reduction in the coal output and the curtailment of public works caused a slight diminution in domestic sales of explosives. Demands from the export markets, however, increased sufficiently to bring the total volume of trade up to the level of 1931. Trade in the lime group's products showed no fall, despite decreased activity in the building and allied trades and the depressed state of agriculture.

Referring to the fertilizer and synthetic products group, it is stated that sales of nitrogen fertilizers showed a slight increase. All efforts to formulate a world agreement to regulate the manufacture of synthetic nitrogen failed, but in July last the important European producers entered into an arrangement covering the fertilizer year ending June 30, 1933, which, it is hoped, may lead to an agreement of a more permanent nature. Products other than fertilizers manufactured by this group showed increases in volume of sales, and several new products have advanced to the stage of routine manufacture and sale, thus making the large Billingham factory more independent of the fertilizer market.

Italian Blue Vitriol Output

Italy produced 99,567 metric tons of blue vitriol in 1932, an increase of 29 percent over 1931 production, according to information received by the Department of Commerce from the consul at Turin. There are eight producers in Italy with an annual capacity of about 160,000 tons. Two-thirds of the production is controlled by the Montecatini group. Imports during 1932 totaled 7,463 metric tons.

Tartrate exports from Portugal in 1932 included 2,588,782 kilos of winelees and 2,030,941 kilos of argols. The total was 70 percent larger than that of 1931 exports.

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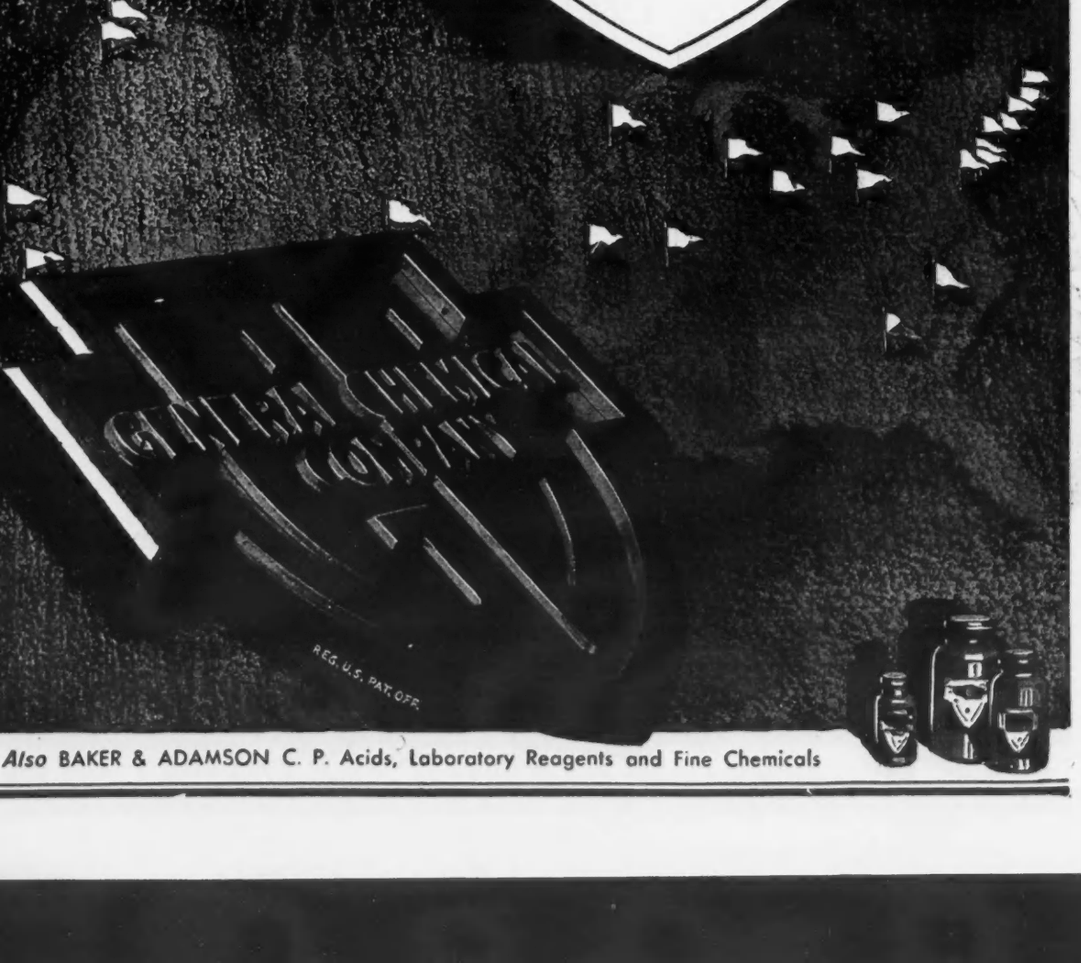

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Farm Buying Aided by Industrial Use of Crops

The condition of agriculture, particularly with respect to the farmer's buying power, is of vital interest to general industry and commerce. The interdependence between agriculture and industry and commerce is fundamental. The welfare of the two interests is of the plainest mutual concern. Industry finds it desirable and profitable to study the problems of agriculture and to lend aid to their solution.

These facts, together with relevant, informative suggestions for the support of agriculture by industry, are presented by the Commercial Solvents Corporation in an article on "Restoring the Farmer's Buying Power," as follows:—

The spotlight of public attention is focussed on the economic condition of agriculture, and no one today doubts that the return of prosperity to the United States depends upon the restoration of buying power to the American farmer.

Every manufacturer—every seller of goods—must take a personal and vital interest in improving the condition of agriculture; for by far the largest potential buying group in this country is the rural population. Forty-four percent of the people in the United States are dependent upon the farm.

How is the economic condition of the farmer to be improved? No matter what differences of opinion may exist as to the methods of bringing quick relief to agriculture, there is unanimous agreement that enduring agricultural prosperity is dependent upon the development of nonfood, industrial uses for farm products. Farm organizations, agricultural leaders, and economists are now thoroughly aroused to the necessity for intensive research leading to the broadening of the markets for farm products in the industries.

Commercial Solvents Corporation links agriculture closely with industry because it converts corn into chemicals which find wide and diversified industrial use. Butanol, butyl acetate, ethyl alcohol, ethyl acetate, acetone, methanol—all these and many other chemicals—are, as produced by Commercial Solvents Corporation, farm products. It is evident that every user of these materials, most of which go into the manufacture of lacquer, is improving the market for his own products by restoring buying power to the farmer.

Nearly two bushels of corn are consumed in making the lacquer for a single automobile, if that lacquer is made with butanol, butyl acetate, and other solvents manufactured by Commercial Solvents Corporation. Thus a part of the purchase price of that automobile is returned to the farmer to assist him in buying an automobile or other commodities. Does this seem like an insignificant return to the farmer? Consider the total volume of goods—automobiles, furniture, and the host of other articles from locomotives to toys which are, or can be, coated with lacquer. These represent an outlet for many millions of bushels of corn.

In addition to the market for corn to be found in the lacquer industry, there are numerous other articles ranging from dresses of artificial silk to photographic films which consume corn after it has been converted to chemicals.

The lacquer manufacturer, the lacquer user, and other consumers of solvents who specify that the solvents they buy shall be those produced from grain, are doubly serving their own special interest; for they are insuring the quality of their product which means the satisfaction of their respective customers and, in addition, they are broadening the market for their products by improving the buying power of the great agricultural population.

The farmer is just beginning to appreciate that he can help himself by discriminating in his purchases—by buying those articles in the manufacture of which his own products have played a part. Agricultural leaders are beginning to take cognizance of the existing threats to the expansion of the industrial market for farm products; and the American farmer—a strong partisan—will soon be thoroughly aroused to the necessity for protecting himself and his markets.

Certainly the day will come when the farmer will ask whether or not the lacquer on the automobile or furniture which he proposes to buy, is made from farm products.

Thus the users of Commercial Solvents Corporation's products not only are assisting in restoring buying power to the farmer, but they are assured of a favorable consideration of their own products by the agricultural population.

Commercial Solvents Asks Court to Punish Union Co.

WILMINGTON, Del., Apr. 10, 1933.

The Commercial Solvents Corporation filed a petition in the Federal district court here April 7 asking that Union Solvents Corporation be adjudged guilty of contempt of court and be made to pay a penalty to Commercial Solvents Corporation. It was alleged that the Union Solvents Corporation violated a decree of court, which enjoined it from infringing on certain claims of the Weizmann patent for manufacture of butyl alcohol and acetone.

Dr. R. P. Anderson, technologist of the American Petroleum Institute, has been directed by the directors of the organization to attend sessions of a newly formed international committee on nomenclature and methods of testing petroleum and lubricants to be held in London in July during the World Petroleum Congress. The World Petroleum Congress, under the sponsorship of the Petroleum Technologists of London, will be held beginning on Wednesday, July 19, and continuing for a week through July 25.

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I. G. Farbenindustrie Is Steadily Adding Products

LONDON, Apr. 6, 1933.

As is well known, Germany showed other countries the way in dyestuffs research, and the great $260,000,000 chemical combine, the I. G. Farbenindustrie Aktiengesellschaft, still markets every year many new dyes synthesized in its vast research department. Dyes, however, have become almost a minor branch of the combine's manufacturing activities. It owns, besides factories for making pharmaceutical drugs, fungicides, and insecticides, caustic soda, foundation products for the rubber and cellulose industries, acids, solvents, tanning materials, light metals, photographic supplies, artificial silk, fertilizers, coal tar derivatives, including gasoline, and many other products. Each of these commodities has a core of research.

The German Dye Trust has a great central laboratory, or "Hauptlaboratorium" in Ludwigshafen with a staff of highly skilled chemists and physicists at work on fundamental problems; another big laboratory at Oppau; and smaller research departments scattered all over Germany, attached to its various factories. There is, for example, an important laboratory at Welfen, where most of the research on dyestuffs is carried out, one for chemical research at Bitterfeld, and others at Hochst, Leverkusen, Griesheim, and elsewhere.

Several revolutions in the chemical industry have already been developed into mammoth scale enterprises by the trust. The contact process of sulphuric acid manufacture was improved out of all recognition by painstaking research, and the commercial synthesis of ammonia by Haber, with its wartime exploitation as a source of nitrates and its post-war effect on the fertilizer industry, only needs to be mentioned. The experience gained in applying such delicate catalytic processes has already led to the synthesis of a wide range of other products such as methanol, gasoline and margarine, which has already rendered many old sources obsolete and holds promise of further effects of a similar character.

Goodrich Perfects Valve

Designed for handling corrosive and abrasive fluids under conditions of fairly high pressure, pulsating pressure, throttling or suction, a new rubber-lined valve of simple, rugged design known as the Vulcalock valve has been perfected by the B. F. Goodrich Rubber Company, Akron, Ohio. The new valve may be lined with any of the standard Goodrich "acidseal" rubber compounds, hard or soft, depending upon conditions of service. The product is believed the nearest approach yet made to a rubber-lined valve for universal application. Representing a distinct departure from previous valve design, the Vulcalock valve is expected to prove of vital interest to engineers confronted with problems of handling corrosive or abrasive fluids. Owing to its simple design the cost is surprisingly moderate..

Action of the valve does not depend upon a flexible diaphragm. The resilient, rounded disc which snaps over a circular plate at the lower end of the stem provides an absolute seal when brought into contact with the molded rubber-covered seat. Both disc and ring are simple, inexpensive, easily replaceable parts. A steady, uniform flow with positive shutoff is obtained under severe operating conditions. The valve can be used with perfect confidence for vacuum and throttling work.

Clean Up and Paint Up Interests Junior Chambers

Harry J. Krusz, executive secretary of the United States Junior Chamber of Commerce, with headquarters in this city, has reported exceptional interest in the clean up and paint up campaign on the part of the Junior Chambers throughout the country, in a letter to the National Clean Up and Paint Up Campaign Bureau at Washington. C. H. Barnes, chairman of the clean up and paint up committee of the United States Junior Chamber of Commerce, whose headquarters are in St. Augustine, Fla., has prepared a special campaign outline for junior chambers of commerce, with the close cooperation of the national clean up and paint up campaign bureau at Washington. The plan, which is now being furnished to all junior chambers, covers six type-written pages, and emphasizes many unique features.

McKesson & Robbins, Inc., Drops 36 Vice-Presidents

At the annual meeting of stockholders of McKesson & Robbins, Inc., all retiring directors scheduled for re-election were elected to serve for the ensuing year, the number of directors having been reduced from twenty-seven to twenty-five. At the organization meeting, which followed the stockholders meeting, F. Donald Coster was re-elected president, and all other officers were re-elected with the exception of the vice-presidents, the number of which were reduced from forty-five to nine. The stockholders approved the transfer of the operating deficit of $4,889,263 to capital surplus. Action on amendment of the charter was deferred until May 9, to which date the meeting was adjourned.

Drug, Chemical Section Will Meet April 20

The Drug, Chemical and Allied Trades Section of the New York Board of Trade at its meeting April 20 will have as a guest and speaker, Billings Wilson, assistant general manager of the Port of New York Authority. He will present some of the accomplishments of the Port Authority. He is particularly desirous of meeting the traffic managers of the city and will discuss with them the existing trucking and traffic problems which confront them. Moving pictures and lantern slides will be an added feature of the meeting, which will be held at the Drug and Chemical Club, this city, with dinner served at 6:30 p. m.

Narcotics Destruction by Police Approved by Trade

Because the articles are generally of poor quality and because it believes that such supplies should be procured by the city from legitimate sources, the destruction of narcotics seized by the police in this city has been approved by the committee on seized narcotics of the New York Board of Trade. The committee, headed by Francis J. McDonough, of the New York Quinine & Chemical Works, presented its views in the following resolution which was approved by the board April 12:—

Resolved: That the New York Board of Trade, Inc., commends the Police Department of the City of New York upon its vigilance in the apprehension and arrest of prisoners violating the narcotic laws. It heartily approves of the prompt disposition of the seized goods by incineration, or such other method as will totally and effectively destroy them; and be it further

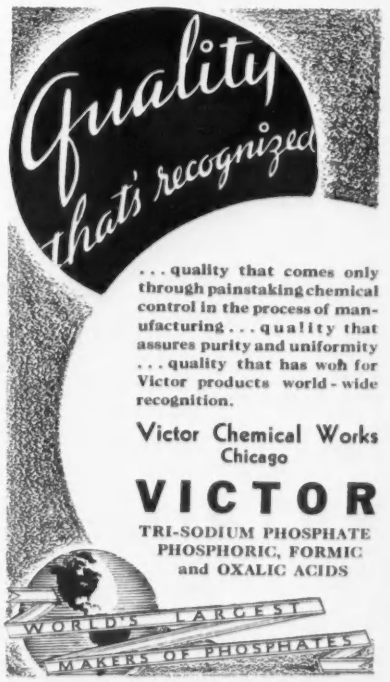
Resolved: That a copy of this resolution be forwarded to the Mayor of the City of New York and the Police Commissioner.

Francis J. McDonough, president of the New York Quinine & Chemical works, this city, returned last week from a stay at Havana, Cuba.

• In the four corners of industry wherever chemicals are used, you will find American Cyanamid & Chemical Corporation represented. So our products enter into nearly every human activity . . . everything that people do. When you drink a glass of water, the glass itself is a whole chemical group; the water is treated, with products such as we make. This "diversification" makes us specialists in many industries . . . of which *your* industry is one.

Acids
Heavy and Industrial Chemicals
Raw Tanning Materials
Natural and Synthetic Gums
Paper Specialties
Chemical Driers
Dyewood Extracts
Waxes
Textile Finishes and Softeners

AMERICAN CYANAMID & CHEMICAL CORPORATION
535 Fifth Avenue, New York


Quality
that's recognized
. . . quality that comes only through painstaking chemical control in the process of manufacturing . . . quality that assures purity and uniformity . . . quality that has won for Victor products world-wide recognition.
Victor Chemical Works
Chicago
VICTOR
TRI-SODIUM PHOSPHATE
PHOSPHORIC, FORMIC
and OXALIC ACIDS
WORLD'S LARGEST
MAKERS OF PHOSPHATES

Coaltar Chemicals

Further Betterment in Benzene Buying -- Toluene Quiet--Flake and Ball Naphthene Continue Active-- Solvent Naphtha Firm--Tar Acid Oil Price Steady

Business in the market for the coaltar crudes held up well throughout the week just closed. This fairly active demand coupled with the low production at the by-product coke plants naturally caused a firm tone to be in prominence. Tight position of the benzene supply was the outstanding feature of the market as a whole. A slight slowing down was evident in the call for the dyestuff intermediates and colors, reflecting the termination of seasonal runs in the textile and tanning industries for the fulfillment of Easter orders.

Contract shipments of benzene last week reached proportions sufficient to give the spot market a decidedly firm tone. Pickup in the rubber tire making industry has not been fully reflected in this market, for it was pointed out that that trade has an inventory sufficient to care for any nearby improvement in production schedules. Chemical manufacturers were coming into the market at frequent intervals for shipments against contracts, and a fair amount of business moved to the paint trade. An encouraging factor regarding production in the steel industry was the report that steel mill operation had been improved more than 3 percent last week to a level of 19½ percent of capacity. In fact, the rise in the ingot steel rate was the largest on record for the current year, bringing the rate nearly to 20.41 percent February average, from which there was a drop to 15.08 percent in March. Improvement in the rate was attributed to buying by the automobile and brewery trades.

Movement of toluene to the automobile industry indicated that those buyers were adhering to a cautious policy in the ordering out of raw material supplies. It was clearly evident that automobile producers were awaiting further developments in the recovery of retail sales before effecting a sharp advance in production schedules. It will be recollected that sales in the first quarter lagged behind production, with the result that dealers' inventories are not entirely down to a minimum. However, reports from the trade were estimating the April production at approximately the output in the same month last year, being 155,136 units. Solvent naphtha moved at a slow pace, but prices were firmly held. There was little change in the market for tar acid oil, with a steady tone in evidence and demand being spotty.

Further broadening was shown in the seasonal buying of flake and ball naphthalene. Cresylic acid experienced a slow call, and prices remained about the same. Phenol continued active, with a good export demand noted. No improvement was shown in the movement of creosote oil. Termination of the Easter production schedules in the textile and tanning industries was noted, bringing about a reduced demand for a number of intermediates and colors, but the market for the colors displayed a steady to firm tone.

Price Changes

Prices were changed during the past week as follows:—

Advanced

None.

Reduced

None.

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
121.3	121.3	121.3	121.4

Market news that may have developed after this report was sent to press will be found on page 2.

Basic Products

Benzene (Benzol).—Contract shipments of the various grades of this product continued at a pace sufficient to give the spot market a decidedly firm price position. Sellers indicated that the chemical manufacturers were the prominent buyers, with a fair amount of material moving in direction of the rubber tire makers and paint trade. Primary factor giving the general market a firm undercurrent was the comparatively low rate of operations at the by-product plants. Shipments to the rubber industry indicated that the inventories on hand were of proportions sufficient to cover for nearby requirements, with the result that the reported drastic bolstering of production schedules in that industry has not been entirely reflected in this market. Steel mill operations last week moved forward to 19½ percent of capacity, marking the largest rise in steel ingot production for the current year, according to Iron Age. This brings the rate nearly to the February average of 20.41 percent, from which there was a drop to 15.08 percent in March. Exports of benzene in February amounted to 50,667 gallons, of which Japan purchased 33,189 gallons; Philippine Islands, 5,779 gallons; Argentine, 11,357 gallons, and Canada, 262 gallons.

Creosote Oil.—The market here noted a freer movement during the week just ended, with the market maintaining a steady tone and prices were unaltered. Of February imports of 921,681 gallons of creosote oil, Japan shipped 874,625 gallons; Canada, 28,674 gallons and United Kingdom, 18,409 gallons.

Cresol.—Buying here showed a tendency to drag at times during the week, but in spite of the rather dull demand sellers reported the market appeared steady and prices were in line with previous values.

Cresylic Acid.—There was a tendency on the part of major consumers to purchase on a restricted hand-to-mouth basis, and with the consuming industries at a relatively low level of operations, demand was highly irregular, but prices held unchanged. February imports amounted to 28,655 gallons, coming from the United Kingdom.

Naphthalene.—Further seasonal improvement developed in the market for the flake and ball items, but otherwise the market was a rather drab affair and prices held unchanged. Of the February imports of 4,027,783 pounds, Belgium shipped 152,233 pounds; Germany, 2,469,627 pounds; Netherlands, 330,693 pounds, and the United Kingdom, 1,075,230.

Phenol.—An active demand continued for this merchandise throughout the week, with a feature of the market the firm undertone. Sellers reported that a good volume of export business, coupled with a fair domestic demand and low operating rate at the by-product plants caused the firm price position.

Solvent Naphtha.—No improvement was shown in the buying here, with consumers apparently having enough material on hand to cover for nearby needs, but the limited production was again the factor contributing firmness to the prices.

Tar Acid Oil.—Small-lot orders made up of the call here, but sellers held firm to 21c. to 22c. per pound for the 15 percent item and 23c. to 25c. per pound for the 25 percent item.

Toluene (Toluol).—Demand here last week reflected a conservative buying policy on the part of the automobile producers, indicating that production schedules were being stepped on basis commensurate with the retail sales of the finished article. A firm tone was a prominent feature in the dealings and sellers were asking previous prices.

Chicago Coaltar Bases

CHICAGO, Apr. 13, 1933.

Coaltar bases are moderately active in this market, with reports of a more encouraging nature current relative to outlook for motor car production and sales. Indications are that the output of bases may be stepped up with reviving steel industry operations, which might offset the indicated increase in demand. Benzene is rather slow. Other products are ruling unchanged. Ruling prices are:—Benzene, 90 percent, 22c. per gallon; motor benzene, 15c. to 16c., exclusive of tax; toluene, 30c.; xylene, 29c.; solvent naphtha, 26c.; creosote oil, grade 1, 11c.

Coaltar Acids

Anthranilic.—A slight slowing down was evident in the buying here, but prices displayed a firm tone and no change in quotations developed.

Benzoic.—This market experienced a comparatively slow call last week, but the technical material continued firm at 40c. per pound.

Cleve's.—A spotty demand was registered here again last week, with the outstanding feature in a rather dull market the firm character of the undercurrent and leading sellers continued to ask 52c. to 54c. per pound.

H.—Although demand failed to show signs of broadening during the period

Current prices on coaltar products are given in the alphabetical list of prices beginning on page 5

KOPPERS

With modern plants, unsurpassed laboratory facilities, a highly-trained technical staff and control of every step in manufacture from the coal mine to the finished product, the Koppers organization is in position to furnish uniform, reliable and standardized coal tar products of almost every description. Samples, prices and full information on request.

BENZOL
TOLUOL
XYLOL
SOLVENT-NAPHTHA
(including high-flash)

COAL TAR PRODUCTS

PHENOL (82% and 90% Purity)
U.S.P. CRESOL
3° META-PARA CRESOL
CRESOL (Resin and Plasticizer grades)
CRESYLIC ACID (98% pale, low-boiling Disinfectant grades) (98% pale, higher-boiling Insecticide grades)

LAMP BLACK OIL
SHINGLE STAIN OIL
CREOSOTE
REFINED TARS
NAPHTHALENE (Crude & Refined)
TAR ACID OILS
PITCH COKE
COAL TAR PITCHES (All Grades)

KOPPERS PRODUCTS COMPANY
1205 Koppers Building, PITTSBURGH
PROVIDENCE CHICAGO NEW YORK BIRMINGHAM SAN FRANCISCO

CRESYLIC ACID 97-99% Pale
AMERICAN-BRITISH CHEMICAL SUPPLIES, Inc.
180 MADISON AVE. Telephones: Ashland 4-2265 and 4-2266 NEW YORK

BENZOL - TOLUOL
SOLVENT NAPHTHA

These standard solvents are supplied in tank wagons and drums from our supply depots, which are listed below. We make a specialty of tank car shipments, which we are in a position to make promptly.

Other Products We Sell
Tar Acid Oils (Free from Naphthalene at 0° C.). Xylol—Motor Benzol—Toluol
Neutral Oil. Liquor Cresolis Compositus, U.S.P. Saponified Cresol Technical
Coal Tar Disinfectants. Pale Cresylic Acid

Stocks Carried at
Detroit, Mich. Cincinnati, Ohio Cleveland, Ohio
Indianapolis, Ind. Minneapolis, Minn. Akron, Ohio
also at
WILLIAM COOPER & NEPHEWS, Inc., 1909 Clifton Ave., Chicago, Ill.

REILLY

Coal Tar PRODUCTS
Carbon PRODUCTS
Chemicals

CRESYLIC ACID
ORTHO CRESOL
CRESOL, U. S. P.
PHENOL, 80 to 98% grades
XYLENOL
REILLY CARBON
FLOTATION REAGENTS
HIGH BOILING TAR ACIDS
NAPHTHALENE REFINED, flake, ball and chipped

Reilly Chemical Company, Inc., Indianapolis, Indiana

under survey, prominent sellers reported the tone was firm at 65c. to 70c. per pound, according to quantity.

Salicylic.—Slowing down in the textile industry naturally resulted in a reduced demand here, but a firm tone ruled the dealings and sellers continued to quote 40c. per pound for the technical article.

Sulphanilic.—Tapering off in demand was apparent here, but the slower demand failed to have a weakening on the market pricewise, with sellers adhering to previous quotations.

Other Intermediates

Anilin Oil.—Further slackening was apparent here, with the consumers adopting a more cautious hand-to-mouth policy as a result of the curtailment in the textile industry, but prices were well sustained.

Anthraquinone.—Demand here was highly irregular last week, but sellers described the market as firm at the previously established price levels.

Betanaphthol. — Business here showed little revision from the previous week, with consumers on all sides covering for immediate needs only and prices holding up well at the levels in vogue previously.

Dinitrophenol. — Shipments here moved out at a satisfactory pace throughout the week, and sellers were quoting the market at 23c. to 24c. per pound, according to quantity.

Methylanthraquinone. — Quiet prevailed in this market during the week just ended, with the usual buyers supplying what little activity was in evidence and prices held unchanged at 65c. to 68c. per pound, according to quantity.

Monochlorbenzene. — Demand here was inclined to drag at frequent intervals, but the irregularity in the call failed to have an influence on the firm tone and prices held unchanged.

Nitrobenzene. — This market moved at a good clip throughout the week just ended and sellers were holding to previously scheduled prices, with a steady tone in evidence.

Orthotoluidin. — Conditions here were about the same as the preceding week, with the call characterized as fair and prices unchanged at 14½c. to 15c. per pound.

Phthalic Anhydride. — Lacquer makers were following the procedure of gauging shipments by actual production needs, causing a rather slow market last week, but prices were well held.

Xylidin. — There was little to report here, with demand from regular buyers limited to small-lot orders, but prices were well maintained.

Coaltar Colors

The market for the coaltar colors noted a slight slackening during the week just ended, with the slower pace attributed to the termination of high production schedules in many textile units upon the fulfillment of Easter orders. However, the market displayed a steady to firm tone. Relative to domestic cotton cloth business the New York Cotton Exchange Service stated that domestic cloth business broadened considerably last week, althougr it was doubtful whether the aggregate volume of orders placed with the mills was equal to current production. The activity was generally confined to the lighter goods for household and apparel use while the heavier goods, mainly for industrial purposes, continued to move slowly. Rayon and silk mill production schedules showed little variance from the relatively low levels of last week. Tanning industry likewise was curtailing production, but a substanital movement of black was noted in that direction.

DuPont's New Dyestuff

The dyestuffs division of E. I. duPont de Nemours & Co. has developed a dyestuff pontamine diazo green GW, which when diabotized and developed with pontamine developer ZN, produces very brilliant shades of yellowish green. The color is recommended for use on cotton, rayon and pure silk. It is expected that pontamine diazo green GW will find extensive use for application to cotton-rayon mixed goods due to its unusual property by dyeing an excellent union on these fibers in full shades at temperatures near the boil.

Brazil Requires Indelible Markings

A Brazilian regulation, effective March 10, requires bags containing merchandise imported into Brazil to be marked on both sides with indelible ink, according to a cablegram received in the Department of Commerce from the commercial attache at Rio de Janeiro. Packages preferably should be marked with stencil, but either stencil or brush may be used, provided bags are marked indelibly on both sides. The marks, serial numbers, and address should be on one side, and the gross and net weights (in metric units) on another side. Consecutive numbering is ordinarily required.

The United Medicine Manufacturers of America will hold its 1933 convention in Chicago, September 10 to 12.

Bids and Awards

Bids Wanted

Acetylene and Oxygen

U. S. Engineer, Galveston

Bids are wanted April 19, circular 183, by the United States engineer office, Galveston, Texas, for acetylene, oxygen and carbide as required during a four month period.

Chemicals

Picatinny Arsenal, N. J.

Bids are wanted April 19, circular 181, by the commanding officer, Picatinny Arsenal, Dover, N. J., for chemicals.

Cutting Oil

Navy Department, Washington

Bids are wanted April 25, schedule 9899, by the bureau of supplies and accounts, Navy Department, Washington, for miscellaneous quantities of soluble cutting oil for east and west yards.

Cyanide of Soda

Rock Island Arsenal, Ill.

Bids are wanted April 18, circular 364, by the commanding officer, Rock Island Arsenal, Ill., for 1,200 pounds of cyanide of soda.

Drugs and Chemicals

Treasury Department, Washington

Bids are wanted April 21, procurement 7326, by the division of supply, Treasury Department, Washington, for 40 cartons of procaine and supranin capsules.

Bids are wanted April 21, procurement 7327, by the division of supply, Treasury Department, Washington, for 20 bottles of acetone.

Bids are wanted April 18, procurement 7329, division of supply, Treasury Department, Washington, for 12 bags of calcium chloride.

Veterans' Bureau

Bids are wanted April 24, procurement 775, by the procurement division, veterans' administration, Washington, for 25 bottles of chloride of potash.

Bids are wanted April 21, procurement 808, by the procurement division, veterans' administration, Washington, for 100 containers of extract of liver and 200 ampules of mercurosal.

Fuel Oil

U. S. Engineer, Kansas City

Bids are wanted April 25, circular 611, by the United States engineer office, Kansas City, Mo., for 1,000,000 gallons of fuel oil.

Navy Department, Washington

Bids are wanted May 12, schedule 9916, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of bunker B fuel oil for various west coast points.

Quartermaster, West Point

Bids are wanted May 3, circular 98, by the quartermaster, West Point, N. Y., for 13,000 gallons of fuel oil.

Gasoline

Army Air Corps, Selfridge Field, Mich.

Bids are wanted April 22, circular 7, by the station supply officer, Army air corps, Selfridge field, Mt. Clemens, Mich., for 29,000 gallons of gasoline and 1,000 gallons of lubricating oil.

U. S. Engineer, Detroit

Bids are wanted April 18, circular 52, by the United States engineer office, Detroit, for 12,000 gallons of gasoline.

Quartermaster, Ft. Mason

Bids are wanted April 24, circular 197, by the quartermaster supply officer, Fort Mason, San Francisco, for gasoline, distillate, kerosene, fuel oil, lubricating oils, motor fuel, and other items for various deliveries during the next fiscal year.

Glass

Navy Department, Washington

Bids are wanted April 25, schedule 9916, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of window and plate glass for east and west yards.

Navy Department, Washington

Bids are wanted April 25, schedule 9913, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of window and plate glass for eastern and western yards.

Lard

Navy Department, Washington

Bids are wanted April 25, schedule 9899, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of lard for east and west yards.

Laundry Supplies

Veterans Bureau, Washington

Bids are wanted April 28, procurement 387-S, by the procurement division, veterans administration, Washington, for 37,440 pounds of bleach, 304,025 pounds of soda ash, 217,760 pounds of laundry soda, 126,350 pounds of laundry sour, 106,055 pounds of starch, 410,550 pounds of trisodium phosphate, for various deliveries.

Lubricating Oil

Army Air Corps, Wright Field, Ohio

Bids are wanted May 2, circular 526, by the office of the contracting officer, Army air corps, Wright field, Dayton, Ohio, for 165 gallons of engine lubricating oil.

Navy Department, Washington

Bids are wanted May 5, schedule 9935, by the bureau of supplies and accounts, Navy Department, Washington, for lubricating oil for eastern and western yards.

Bids are wanted May 5, schedule 9862, by the bureau of supplies and accounts, Navy Department, Washington, for lubricating oils during the next fiscal year for all ports.

Oils

Navy Department, Washington

Bids are wanted April 25, schedule 9899, by the bureau of supplies and accounts, Navy Department, Washington, for cutting oil, mineral lard oil, pure oil, paraffin and petrolatum for eastern and western yards.

Paints

Quartermaster, Kelly Field, Texas

Bids are wanted April 20, circular 22, by the quartermaster, the A. C. A. F. S., Kelly field, Texas, for 25 gallons of paint drier, 500 gallons of white paint, 50 gallons of black paint, 50 gallons of moss green paint, 300 pounds of putty, 400 gallons of linseed oil, 110 gallons of turpentine, and 50 pounds of pigments in oil.

Quartermaster, Holabird, Md.

Bids are wanted April 18, circular 93, by the quartermaster, Camp Holabird quartermaster depot, Md., for 1,500 gallons of white paint, 1,000 gallons of linseed oil, and 1,000 gallons of turpentine.

Paraffin and Petrolatum

Navy Department, Washington

Bids are wanted April 25, schedule 9899, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of paraffin and petrolatum for east and west yards.

Pigment

Naval Aircraft Factory, Philadelphia

Bids are wanted April 20, requisition 1047 Aero, by the supply officer, naval aircraft factory, Navy Yard, Philadelphia, for 3,000 pounds of aluminum bronze powder dry pigment.

Rust Preventive

Springfield Armory, Mass.

Bids are wanted April 20, circular 31, by the commanding officer, Sprinfield Armory, Mass., for 4,000 pounds of rust preventive.

Silicate of Soda

Treasury Department, Washington

Bids are wanted April 18, procurement 7297, by the division of supply, Treasury Department, Washington, for 10 cans of silicate of soda.

Soap

Panama Canal, Washington

Bids are wanted April 20, schedule 2855, by the general purchasing officer, The Panama Canal, Washington, for 1,875 pounds of toilet soap, and 30,000 pounds of salt water soap.

Quartermaster, Ft. Mason, Calif.

Bids are wanted April 27, circular 194, by the quartermaster supply officer, Fort Mason, San Francisco, for 82.50 cakes of grit scouring soap.

Veterans' Bureau, Washington

Bids are wanted April 21, procurement 388-S, by the procurement division, veterans' administration, Washington, for 117,808 pounds of scouring powder, 12,600 pounds of scouring powder, 128,824 pounds of scouring powder, 57,400 pounds of scouring powder, 30,290 pounds of grit soap, 5,850 pounds of grit soap, 414,265 pounds of laundry soap, 582,550 pounds of soap powder, 161,325 pounds of toilet soap, 278,497 pounds of toilet soap, and 803,800 pounds of laundry soap, for various deliveries.

Tallow

Navy Department, Washington

Bids are wanted April 25, schedule 9892, by the bureau of supplies and accounts, Navy Department, Washington, for miscellaneous quantities of tallow for eastern and western yards.

Yeast

Navy Department, Washington

Bids are wanted May 2, schedule 9940, by the bureau of supplies and accounts, Navy Department, Washington, for quantities of yeast, for various west coast deliveries.

Army Quartermaster, Chicago

Bids are wanted May 2, circular 92, by the quartermaster supply officer, quartermaster depot, 1819 West Pershing road, Chicago, for compressed yeast for various deliveries during the next fiscal year.

Contracts Awarded

Chemicals

Army Air Corps, Wright Field, Ohio

Awards under circular 383, opening of February 23, were as follows:—

Conray Products Company, New York, 1,400 pounds of granular aluminum potassium sulphate, 6.3 cents; 175 pounds of yellow (Pbo.) lead oxide, 12.5 cents; ½ of 1 percent.

Linde Air Products Company, New York, 10,000 pounds of calcium carbide, 4.7 cents, f.o.b. Dayton, Ohio.

Schuylkill Chemical Company, Philadelphia, 1,000 pounds of ferric ammonium citrate, 38 cents; and 1,500 pounds of technical ferric sodium oxalate, 23.4 cents; 1 percent.

James Good, Inc., Philadelphia, 100 pounds of ferric oxalate, 59 cents; 1 percent.

E. I. duPont de Nemours & Co., Wilmington, Del., 2,300 pounds of egg sodium cyanide, 18.5 cents; ½ of 1 percent, 20 days.

Drugs and Chemicals

Veterans' Bureau, Washington

Schering & Glatz, Inc., N. Y. City, procurement 625, opening March 7, 15 vials of ephthamine, $28.95.

Picker X-Ray Company, procurement 625, March 7, 60 ampules of neo-topax, $149.40.

Drugs and Chemicals

Army Medical Corps, Brooklyn

Awards under circular 45, opening of February 20, for drugs and chemicals were as follows:—

Merck & Co., Rahway, N. J., 650 bottles of acetone, 18 cents; 60 bottles of acetone, 66 cents; 250 bottles of acetic acid, 22 cents; 350 bottles of chromic acid, 18 cents; 1,000 bottles of hydrochloric acid, 21 cents; 50 bottles of hydrochloric acid, 65 cents; 250 bottles of nitric acid, 24 cents; 18 bottles of nitric acid, 85 cents; 50 bottles of oleic acid, 18 cents; 500 containers of oxalic acid, 15 cents; 250 bottles of picric acid, 8 cents; 100 bottles of salphosalicylic acid, 350 bottles of sulphuric acid, 24 cents; 50 bottles of sulphuric acid, 85 cents; 600 bottles of methyl alcohol, 20 cents; 140 bottles of ammonia water, 13 cents; 50 bottles of antipyrene, 47 cents; 500 containers of calcium carbonate, 7.5 cents; 2,000 bottles of carbon tetrachloride, 6 cents; 2,100 bottles of chloroform, 25.5 cents; 300 bottles of chromium potassium sulphate, 12 cents; 1,200 bottles of eucalyptol, 6 cents; 800 bottles of iodoform, 85 cents; 1,000 containers of magnesium carbonate, 15 cents; 1,000 tins of magnesium oxide, 32 cents; 750 cans of mercurial ointment, 45 cents; 25 bottles of red mercuric oxide, 35 cents; 400 bottles of mercurous chloride, 20 cents; 300 bottles of mercury, 22 cents; 2,400 tubes of neoarsphenamine, 5.25 cents; 450 tubes of neoarsphenamine, 5.5 cents; 4,300 tubes of neoarsphenamine, 6 cents; 1,300 tubes of neoarsphenamine, 6 cents; 4,300 tubes of neoarsphenamine, 6 cents; 15 containers of platinic chloride, 90 cents; 600 bottles of potassium arsenite solution, 5.5 cents; 100 bottles of potassium dichromate, 11 cents; 9,000 bottles of quinine, 42 cents; 150 bottles of resorcinol, 34 cents; 3,000 bottles of bicarbonate of soda, 9.5 cents; 1,000 bottles of soda borate, 11 cents; 500 bottles of sodium bromide, 33 cents; 200 bottles of sodium cirate, 33 cents; 100 bottles of sodium iodide, 55 cents; 1,200 bottles of sodium perborate, 9 cents; 300 bottles of sodium sulphate, 12 cents; 300 bottles of sodium thiosulphate, 7.5 cents; 1,000 bottles of terpin hydrate, 5 cents; 200 bottles of thymol, 9 cents; 150 containers of zinc stearate, 8.5 cents; 1,600 bottles of zinc sulphate, 14 cents; 1,200 bottles of potassium iodide, $1.74; 800 bottles of lead acetate, 17 cents; 1,000 bottles of xylene, 12 cents; 1 percent.

American Pharmaceutical Company, New York city, 200 bottles of acetphenetidin, $1.03; 2,400 bottles of acetylsalicylic acid, 60 cents; 2,400 bottles of acetylsalicylic acid, 58 cents; 200 bottles of balsam of Peru, 83 cents; 200 bottles of ephedrine alkaloid, $1.13; 2,400 bottles if bitumen sulphonatum, 12.5 cents; 400 bottles of procaine hydrochloride, 89 cents; 1 percent.

Charles Pfizer & Co., New York City, 600 bottles of citric acid, 33 cents; 1 percent.

Dewey & Almy Chemical Company, 160 bottles of acetic acid, 71.85 cents; 1 percent.

New York Quinine & Chemical Works, New York city, 400 bottles of tannic acid, 22 cents; 250 bottles of homatropine hydrobromide, 27 cents; 1,000 containers of sodium fluoride, 12.9 cents; 1 percent.

Sharp & Dohme, Inc., Baltimore, 600 bottles of aromatic spirits of ammonia, 37 cents; 150 bottles of syrup ferrous rodide, 40 cents; 125 bottles of F. E. belladonna, 20 cents; 175 bottles of F. E. cannabis, 26 cents; 50 bottles of ginger, 20 cents; 2,000 ampules of insulin, 45 cents; 100 boxes of tetrachlorethylene, 66 cents; 600 bottles of tincture of gentian, 30 cents; 200 bottles of tincture of nux vomica, 37 cents; 2 percent.

Mallinckrodt Chemical Works, St. Louis, 100 bottles of carbonate of ammonia, 21.5 cents; 100 bottles of carbon disulphide, 22 cents; 75 bottles of sodium tungstate, 25 cents; 1 percent.

E. R. Squibb & Son, Brooklyn, N. Y., 550 tubes of arsphenamine, 22.5 cents; 500 bottles of bismuth salicylate, 30 cents; 8,000 bottles of F. E. cascara sagrada, 30 cents; 700 bottles of codliver oil, 18.5 cents; 5,000 bottles of petrolatum, 24 cents; 2,500 bottles of silver protein, 55 cents; 2 percent.

Fritzsche Brothers, New York city, 60 bottles of benzyl benzoate, 10 cents; 100 bottles of cedarwood oil, 20 cents; 1 percent.

Allaire, Woodward & Co., 200 bottles of capsicum, 5 cents; 300 bottles of glycyrrhiza, 19 cents; 150 bottles of rhubarb, 15 cents; 200 bottles of tincture of aconite, 5 cents.

Monsanto Chemical Works, Inc., 60 bottles of chloral hydrate, 20.5 cents; 1 percent.

John Wyeth & Brother, Philadelphia, 2,000 bottles of codeine sulphate, 23 cents; 50 jars of extra of belladonna leaves, 16 cents; 1,000 bottles of tincture of benzoin, 49 cents.

B. R. Elk & Co., 1,200 bottles of collodion, 4.95 cents; 300 bottles of tincture of cardamom, 29.9 cents; 1,000 jars of zinc oxide ointment, 20.9 cents; 200 jars of zinc oxide paste, 19.4 cents; 1 percent.

Brewer & Co., 1,000 bottles of coryza tablets, 14.9 cents.

Ethylene Glycol

Army Air Corps, Wright Field, Ohio

Carbide & Carbon Chemicals Corporation, New York, circular 453, March 22, 689 gallons of ethylene glycol, 2s cents a pound for 6,500 pounds, f.o.b. South Charleston, W. Va.

Lard Oil

Army Air Corps, Wright Field, Ohio

Conray Products Company, New York, circular 428, March 13, 400 gallons of lard oil in 1-gallon cans, 56.9 cents; and 1,300 gallons of lard oil in 5-gallon cans, 45.9 cents, f.o.b. Pittsburgh; ¼ of 1 percent.

Nitrogen

Frankford Arsenal, Philadelphia

Air Reduction Sales Company, New York, procurement 270, February 9, 7,500 cubic feet of nitgoren in 250 cubic-foot capacity government-owned cylinders, $3.98 per cubic foot.

Sulphate of Alumina

Frankford Arsenal, Philadelphia

American Cyanamid & Chemical Corporation, New York, procurement 333, March 30, 50,000 pounds of lum sulphate of alumina in sacks, 1.26 cents a pound.

Sulphur Trioxide

Edgewood Arsenal, Md.

Merrimac Chemical Company, procurement 40, February 9, 75,000 pounds of sulphur trioxide, 8.65 cents; credit $8 for each drum; 1 percent.

Merrimac Chemical Company, procurement 42, February 27, 20,000 pounds of sulphur trioxide chlorsulphonic, 8.65 cents; 1 percent.

Toluene

Naval Aircraft Factory, Philadelphia

James Good, Inc., Philadelphia, requisition 1051, March 30, 480 gallons of toluene, 48.4 cents a gallon.

Bodman Establishes Own Business

F. L. Bodman, who has been closely associated with the drug, chemical and allied industries for the last thirty-two years, will start operations April 17 as manufacturers agent covering the Philadelphia, Baltimore and Washington territories. He has established his offices at 253 Bourse building, Philadelphia, and will have the lines of the New York Quinine & Chemical Works, Brooklyn, N. Y.; Benzol Products Company, Newark, N. J.; Wah Chang Trading Corporation, this city; and Bates Chemical Company, makers of certified food colors, Lansdowne, Pa. Mr. Bodman will represent these concerns in the three territories mentioned, excepting the New York Quinine & Chemical Works, which he will represent only in Philadelphia, that company having other selling arrangements in Baltimore and Washington. Mr. Bodman started in the drug and chemical industry in 1900 with Parke, Davis & Co., at Boston. In 1905 he joined Powers, Weightman & Rosengarten Company, Philadelphia, representing that firm in New England, Baltimore, Washington and Virginia, and in 1919 he became sales manager with headquarters in Philadelphia, retaining that position until 1927 when he became Philadelphia branch manager and manager of the industrial division of Merck & Co. He severed this last named connection in January 31, this year.

Paint, Varnish, Lacquer Chemicals

Dry Red Lead, Litharge and Orange Mineral Higher Following Metal Rise -- Domestic Casein Price Increased--Small but Steady Seasonal Gain in Business

Although handicapped by a consistent lack of "painting weather," business in paint, varnish and lacquer chemicals improved in a small way last week. Pigments, colors, mineral whites and vehicles were favored with broader and more frequent demands, while varnish gums were exceptions to the general rule. Metallic driers held their own. Price movements last week were led by an increase in dry red lead, litharge and orange mineral. Cask prices for the lead oxides were marked up Tuesday following a jump in pig lead. The advance was the second upward movement in lead derivatives since last December, the first having occurred on March 9, and later erased by the decline on March 23. Lead corroders stated that the advance failed to bring about the expected improvement in buying interest, which was perhaps due to the fact that so many false starts have been made recently in advancing commodity prices that buyers prefer to wait out the permanency of an advance in price and do not rush to cover as they formerly did on rising markets.

Domestic casein prices have strengthened on the small production current. Although demand was light and the "flush" production of the Spring is not far off, current stocks are not heavy, and producers asked for higher prices. The only negative price development occurred in hardwood pitch, and this movement was not wholly allied with the past week. The market for that commodity softened under competition for the limited volume of business coming from the rubber trade, and delivered prices at Akron were off from the basis last reported.

Imported zinc oxide prices continued flexible according to quality. High-grade imported oxides and domestic oxides were steady in price, and demands were reported as having broadened in most lines of consumption. Paint makers were more frequent buyers, and the linoleum trade also bought in better fashion, although shippers of lithopone and wood flour to the latter could not point to the same condition.

Prices quoted by spot and primary market holders of varnish gums were unchanged over the week. Factors in the foreign markets held their position even, awaiting a revival of business in this market, and prices were nominal throughout.

Preliminary returns on building operations for March show an expenditure of $15,733,942, compared with $15,933,279 in February and $32,260,814 in March a year ago, according to Dun and Bradstreet's surveys of 186 identical cities. Building operations in New York City during March was $4,040,707, against $6,752,130 in February and $6,715,991 in March last year.

Price Changes

Prices were changed during the past week as follows:—

Advanced

Casein, domestic, ½c. per lb.
Lead, red, dry, casks, ¼c. per lb.
Litharge, commercial, casks, ¼c. per lb.
Orange mineral, American, casks, ½c. per lb.

Reduced

Pitch, hardwood, $1.80 to $2 per ton.

Comparative Values

Index numbers compiled from eleven typical paint and varnish materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
131.2	131.2	131.2	133.6

Market news that may have developed after this report was sent to press will be found on page 2.

Metallic Lead and Zinc

The market opened last week with fair activity and, in company with the improving position of other metals, prices were advanced sharply on Tuesday. Sellers quoted 3.125c. per pound East St. Louis and 3.25c. per pound at New York, a rise of 25 points. Buyers were active following the price boost, but demand petered out as the week progressed. It was evident that the buying trades were holding off to test the permanency of the rise, as a similar boost was made last month, only to recede a short time later. There was a good inquiry, however, for May position, but actual sales for May shipment were quite below expectations. London was steady last week.

Zinc opened the week with a rise of 10 points over the preceding week's close. Sellers quoted 3.10c. per pound at East St. Louis and nominally 3.45c. per pound at New York. The inauguration of the "stagger system" of production in all large mines a week ago has given the zinc market a considerably better prospective. Buyers were active, particularly for forward position, and the market's close was a strong one last week. Sales of prime western zinc during March for March delivery were 6,195 pounds for an average price of 2.095c. per pound, and sales during March for subsequent delivery were 2,205 tons for an average price of 3.067c. per pound, according to the American Zinc Institute.

Lead Prices

Prevailing spot prices at New York, East St. Louis and London for the period from April 8 to April 14, inclusive, are as follows:—

	Pigs		Spot, London.
	Per pound		Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0360	$0.02875	.. .. ..
Monday	.0360	.02875	10 15 0
Tuesday	.0325	.03125	11 0 0
Wednesday	.0325	.03125	10 16 3
Thursday	.0325	.03125	10 15 0
Friday	.0325	.03125	* .. .. ..

* Holiday.

Zinc Prices

Prevailing spot prices at New York, East St. Louis and London for the period from April 8 to April 14, inclusive, are as follows:—

	Slabs		Spot, London.
	Per pound		Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0335	$0.0300	.. .. ..
Monday	.0345	.0310	14 8 9
Tuesday	.0345	.0310	14 17 6
Wednesday	.0345	.0310	14 15 0
Thursday	.0345	.0310	14 15 0
Friday	.0345	.0310	* .. .. ..

* Holiday.

Pigments

An advance of a quarter-cent per pound in lead oxide prices was the outstanding occurrence in the pigment market last week. In sympathy with a 25-point jump in pig lead, the corroders of dry red lead, litharge and orange mineral advanced their cask prices on Tuesday. This was the second such mark-up since last December, the first having been made on March 9, but was short-lived and erased by the decline on March 23. Keg prices were untouched. The advance in prices did not activate the demand for lead oxides, although most other pigments were in better request last week. Zinc oxide and titanium pigments shared in a generally faster movement toward consumption.

White Lead.—The market was undisturbed by the movement in pig lead and producers continued to quote basic carbonate at 6c. per pound and basic sulphate at 5½c. per pound in cask quantities. These pigments in company with lead-in-oil showed a slightly faster movement into consumption last week.

Red Lead.—Dry material in casks was advanced ¼c. per pound on Tuesday. The corroders now quoted 6¾c. per pound, restoring the price levels that was in force for the brief period from March 9 to March 23. Lead-in-oil prices were untouched. The advance did not result in much increase of business.

Litharge.—The price for this lead derivative in casks was advanced ¼c. per pound on Tuesday, bringing the market to 5¾c. per pound for the commercial grade. Like other lead oxides, demand was not hastened by the advance, due perhaps to the fact that buyers were hesitant because of earlier false starts toward higher prices.

Lithopone.—April business to date was comfortably ahead of the corresponding period for the preceding month, according to representative producers. Orders were still limited to needed amounts with most requests

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 5

SUPERLITH XXX
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ALUMINUM STEARATE CALCIUM STEARATE
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Precise grades to meet any industrial requirement . . .
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METASAP CHEMICAL COMPANY
BOSTON CHICAGO
HARRISON, N. J.

for about twenty bags at a time but their frequency was improved. Quotations continued unchanged at 4½c. to 4¾c. per pound.

Orange Mineral.—The prices were advanced ¼c. per pound on Tuesday, with material from white lead quoted at 10½c. per pound and the product derived from red lead at 9¼c. per pound. Demand was rather spotty and not visibly improved by the advance in price which was the first movement in prices since March 23.

Titanium Pigment.—A broader seasonal movement was reported last week for both the barium and calcium base pigments. Contract takings were more frequent. The prices remained firm at the basis of 6c. to 6¼c. per pound for car lot amounts.

Zinc Oxide.—The paint industry's need for replacements continued to evidence seasonal growth and the aggregate of business done in this commodity last week was reported as having been fairly good by comparison. Imported oxides continued under an assortment of prices, depending upon quality, but the domestic was held firm and unchanged.

Barytes.—The withdrawals against contracts were slightly better over the past week. Open market business was not very heavy. Quotations for domestic white material continued steady at the basis of $22.20 to $23 per ton, in car lots, according to packing. Importers continued to quote $23 to $27 per ton, ex-dock.

Dry Colors

Purchase of colors continued to broaden over last week, and while the trading was still very spotty and irregular, there has been a gradual betterment, in takings as the season progresses. Carbon black and others of importance in the rubber trade were not favored with any improvement in consumption and were close to a virtual stand-still insofar as their use by makers of tires and rubber products was concerned. Prices lacked movements of importance during the week.

Carbon Black.—The tire trade continued with very small-scale operations and their consumption of black continued at a low rate. The paint and ink trades, however, were buying in slightly better fashion. Prices continued unchanged both here and at the Southern producing points.

Carmine.—There has been no business of size recently. Quotations for 11-pound tins were named at 3.65c. to 3.75c. per pound, while on contracts for quantities of 100 pounds, the market was priced at 3.25c. per pound, with a possibility of doing better in some directions.

Chrome Greens.—The call for greens continued spotty but in company with other colors, some added activity has been noted over the past fortnight. The prices continued without a quotable change.

Chrome Yellow.—April takings to date were estimated by representative suppliers to have been ahead of March although by no great margin. The price situation was a steady one with material against contract offered at 14c. per pound and 15c. per pound on open order.

Iron Blues.—Although red prussiate declined sharply last week, the yellow prussiate product which is used as a raw material in the manufacture of some blues was unchanged and the blue market was firm at the basis of 33½c. to 35c. per pound.

Iron Oxides.—The market for these colors showed no appreciable change over the past week. Indian red continued at 8¾c. to 9c. per pound for the pure grade, but as previously reported, better could have been done on quantity. Venetian red was unchanged.

Ocher.—There have been no new or important developments in the market. Trade was reported as spotty with small improvements here and there but no general betterment was observed. French continued on a fairly steady price basis, while the domestic yellow and golden products were also unchanged.

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 5

Vermilion. — Quotations for large-sized lots of English continued at $1.10 to $1.15 per pound last week, with some makers refusing to offer below the $1.15 per pound level. Smaller lots were named at $1.15 to $1.30 per pound. Demand was not very lively and competition for the available business was keen.

Colors in Oils

The replacement call for colors ground in oil has not shown much betterment over recent weeks. Dealers and manufacturing users in the local zone were evidently amply supplied for their current needs and such purchasing that was reported was usually limited to small job-lot quantities. Prices were without change.

Varnish Gums

The signs of life in the varnish gum market which appeared over the final half of the preceding week were not carried over into last week. The period under review was one of distinct quiet, marked only by small-lot trades which occurred at infrequent intervals. Buyers were not prone to evince any anticipation of better business ahead, but continued to purchase for their immediate requirements only. Primary markets were lacking in new or important developments and prices were held even. Spot market prices were entirely nominal.

Copals.—Other than a small job-lot business, there has not been much activity in the market. The week's opening failed to hold the slightly better appearance of the final half of the preceding weeks. Quotations on spot continued at nominal and unchanged levels. Receipts of copal gum at Antwerp from the Belgian Congo in February were estimated at 883 tons, a gain of 290 tons over the previous month and 322 tons more than for the same month of 1932. Total exports of copal gum from Antwerp in 1932 were 9,782 tons, against 12,164 tons for 1931. The share of the United States in the exports for 1932 and 1931 were, respectively, 869 and 1,785 tons.

Dammars.—Both Batavia and Singapore gums were reported to have been held steady in the primary markets while sellers there were awaiting for business improvements here. Spot prices were nominal and unchanged, with very little interest shown in buying circles.

Kauri.—This was another gum where activity was constituted by only small job-lot purchases which were placed at rather infrequent intervals. There have been no recent advices from Auckland regarding production and exports, but prices there continued at nominal and unchanged levels.

Other Paint Materials

Mineral whites were favored with a slightly better call in some directions, although many of the miscellaneous paint materials included in this group were as slow as previously. Whiting was subject to a slightly better call. Casein was quiet at higher prices. Hardwood pitch was lower in one direction, although lower prices for that commodity were not wholly developments of the past week. Talc was unchanged in both price and position.

Casein. — Prices for domestic have strengthened on the small production current. Sellers now quoted 7½c. to 8c. per pound for car lots of the standard ground and 8c. to 9c. per pound for the 80-100-mesh finely ground article. These quotations average ½c. per pound above the former level. Demand continued light, but firmness was

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Paint, Varnish and Lacquer Sales: February

Sales of paint, varnish and lacquer products in February totaled $12,348,480 in value, according to a preliminary report by the United States Bureau of Census from data supplied by 588 establishments. This compared with $11,949,950 in January and $16,270,822 in February last year. A record of sales in February, compared with revised figures for January and sales by months during 1932, follow:—

		Classified sales reported by 344 establishments				
	Total sales reported by 588 establishments.	Industrial sales			Trade sales of paint, varnish and lacquer.	Unclassified sales reported 244 establishments.
		Total.	Paint and varnish.	Lacquer.		
1933.						
January*	$11,949,950	$3,529,916	$2,386,977	$1,142,939	$4,172,580	$4,247,454
February†	12,348,480	3,419,755	2,440,896	978,859	4,775,416	4,153,309
1932.						
January	15,894,506	Comparable statistics not available.				
February	16,270,822					
March	19,089,005					
April	22,612,193					
May	24,981,441					
June	19,637,358	4,685,399	3,617,719	1,067,680	8,734,330	6,217,629
July	14,430,122	3,793,245	2,900,707	892,538	6,058,813	4,578,064
August	16,032,441	3,851,028	3,057,096	793,932	6,918,659	5,262,754
September	16,805,712	3,980,564	3,113,303	867,261	7,216,748	5,608,400
October	15,592,377	3,996,500	3,036,323	960,177	6,610,611	4,985,866
November	13,260,328	3,599,319	2,639,362	959,957	5,196,766	4,464,243
December	10,127,780	3,222,770	2,186,706	1,036,064	3,506,715	3,398,295
Totals, year	$204,734,085	.....	.....	.....	.....	.....

* Revised. † Preliminary.

looked for in the price situation, at least until the flush production which should commence soon.

Hardwood Pitch.—The market has softened somewhat, although not wholly within the past week. Sellers were currently quoting around $24 to $25 per ton for car-lot quantities delivered at Akron, compared with $25.80 to $26 per ton formerly.

Whiting.—The movement into consumption was slightly faster last week, according to some sellers. The prices continued in a steady position for both cliffstone and chalk whiting. Ground limestone was also unchanged.

Driers

Metallic driers have maintained a favorable rate of sale during April to date as compared with a like period during March, but business was still described as spotty and irregular. Stearate prices were unchanged and still flexible under competition or where quantities of size were involved. Other drier prices were without change.

Glues

The seasonal improvements of the past few weeks were maintained over last week, particularly with regards to purchasing of glue by the silk industry for sizing purposes. Calcimine manufacturers were also fairly active buyers last week. The common grades of bone glue continued at 6c. to 9c. per pound in car lots, although 5½c. per pound was still offered in some directions. The prices for hide glues were unchanged throughout.

Metal Leaf

Gold leaf production continued in a small way and close to the limited demands of the market. Metal leaf was bought in a very spotty fashion with buyers still limiting their orders to their actual and immediate needs. The prices for aluminum, silver and composition leaf were without a quotable change, but continued under shading as a result of competition.

Lacquer Materials

The market for the various lacquer materials showed little change from the preceding period from a demand standpoint, and prices held steady to firm. Automobile industry continued to purchase on a hand-to-mouth basis, and were apparently awaiting further improvement in the retail sales of their finished articles before drastically stepping up production schedules. However, word from Detroit continued to be optimistic relative to the April output, indicating that production would approximate 150,000 units. Ethyl acetate was firmer, with demand irregular. Demand for butyl alcohol was considered good last week, with a steady tone ruling the dealings. Routine buying supplied what little activity was noted in buytl lactate and orders coming into the market for acetone indicated buyers were adhering to a conservative buying policy.

Acetone. — Nothing of outstanding importance developed here, with the market moving through another routine week and prices held unchanged.

Butyl Alcohol. — Shipments against contracts were said to be holding up fairly well during the period under review, and leading sellers reported a firm tone was a prominent feature in the dealings.

Butyl Propionate.—An irregular call was registered here, but pricewise the market held firm, and sellers were asking 20c. to 23c. per pound, according to quantity.

Butyl Lactate.—Demand here moved at a comparatively slow pace, with consumers content to cover for actual needs only, but prices were well maintained.

Diethyl Phthalate.—Buying of this product was light last week, but no change was disclosed in the quotations, with a steady tone in evidence.

Ethyl Acetate. — Slight betterment was shown here, with buyers coming into the market for immediate requirements, and the undertone developed a firmer tendency, with producers holding to previous quotations.

Nitrocellulose. — Quiet prevailed in this market, with buyers adhering to a conservative policy in purchasing, but sellers were naming quotations in line with previous prices.

Window Glass

The past week was not better than its predecessor insofar as the demand for window glass was concerned. Demands by dealers and distributors were light and held close to actual and immediate needs. As reported previously, the window glass manufacturers are producing at a bare minimum and with a liklihood of very little residential or commercial construction this Spring, the glass makers were anxious to work off their current stocks rather than keep their plants in operation.

Philadelphia Paint Men Greet Master Painters

Master painters and salesmen of Philadelphia had a "get-together" meeting April 7 at the stated meeting of the Philadelphia Save the Surface Salesmen's Club in the Rittenhouse Hotel, the object of the meeting being the formulation of plans for closer cooperation between the master painter and paint salesmen, with a view to obtaining more business for the master painter and the better and greater use of good painting materials.

President Ralph Ebeling spoke of the necessary co-operative movements and ways and means of reaching the desired goal. John Brosnan, of Jas. S. Wilson & Son, Inc., addressed the meeting on the subject of the "license painter" law which had the endorsemen of all those present. George S. Stuart, secretary of the Pennsylvania State Master Painters' Association, delivered an address regarding the large volume of potential business at hand and stressed the necessity for doing a real selling job with the property owner by a combination of personal solicitation and advertising.

Harry Kosove, president of the Philadelphia Master Painters' Association, and Theodore Fonash, president of the Germantown Master Painters' Association, expressed the hope that their respective groups may increase their membership and urged the co-operation of the salesmen.

Bill Wallace, of the "outing" committee, announced an invitation from the Philadelphia Paint Club to participate in an outing to be held Wednesday, June 21, at Turner's Country Club, Eddington, Pa. The next and final meeting of the spring season of the salesmen will be on Friday evening, May 5, at the Rittenhouse.

British Paint Concern Makes Great Progress

LONDON, Apr. 8, 1933.

As indicated by the recent report, Pinchin, Johnson & Co., a large paint firm, had a very satisfactory trading period last year. Edward Robson, chairman, was able at the annual meeting to report an increase in output of many hundreds of tons, though, owing to lower price averages obtained, the monetary value was less. The program of extending and reconstructing technical and manufacturing facilities now practically has been completed

As to the outlook, the directors stated that they have the fullest confidence in the future of the demand for paint, and with any modest improvement in the world situation they stated that they anticipate a prompt and substantial reflection in the company's business.

Casein imports into Germany in 1932 totaled 15,798 metric tons, compared with 15,760 tons in 1931. Argentina supplied 60 percent of the casein imported in 1932. Denmark, which was the chief source in 1931, dropped to second place with about 26 percent.

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CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

Chicago Paint Club Has Many Activities Planned

CHICAGO, April 12, 1933.

Projected spring and summer activities of members of the paint and allied trades are occupying the attention of the various paint trade associations. Several of these center around the plans for beautifying the city and many of its suburbs for the Century of Progress Exposition, which opens in June and extends for a period of months.

R. M. Neumann, chairman of the trade promotion committee, told the members of the Chicago Paint, Oil and Varnish Club at its meeting April 6 of plans for this year's clean-up and paint-up campaign, which starts April 19 and continues through April 27. Indications of enthusiastic co-operation of all groups and individuals affiliated with the movement are being noted, it was stated by Mr. Neumann.

Plans also are being perfected by the local organization, as well as the national paint associations, for the annual meetings of the latter at Chicago in October, during the latter part of the world's fair. A part of the April meeting of the Chicago club was given over to discussion of these plans, with talks made by several officials of the national organizations.

Activities of the Chicago Paint, Oil and Varnish Golf Club are by now well planned out and this should form one of the brightest spots in paint trade circle activities this summer. As planned, the first of the summer tournaments will be at the Glen Oak Country Club, May 25, with one each month at a different club, until the final tournament in October. Registrations are reported around 70 members, at the $3.50 registration rate. The fee for daily play has been reduced this year and it is anticipated that in number of players and in general character the club's golf season will be an unusually successful one. A preliminary get-together for all members, new and old, is being planned for some time in the next few weeks.

The April meeting of the Chicago Paint and Varnish Production Club at the Midland Club, April 3, was featured by an address by C. D. Holley, director of research for Sherwin-Williams Company, with headquarters at Detroit. The attention of the club was directed by the speaker largely toward the question of selection of wood test panels for experimental purposes. Sharp criticism was voiced by the speaker of the methods used in basing procedure on faulty conclusions as the result of improper choice of panel types.

The speaker blamed lack of fundamental knowledge in the industry of chemical and physical characteristics of woods for much of the troubles experienced by the industry.

L. E. Morgan, chairman of the club's test fence committee, gave a report on the result of his recent inspection of the club's test fence.

Evans-Wallower Lead Co. Reports Deficit for 1932

The Evans-Wallower Lead Company has reported a net loss of $110,561 for the year ended December 31, 1932, after expenses, depreciation, depletion and other charges. This loss compard with a loss of $319,312 for the year 1931. After adjustment of surplus by taking credit for $1,355 for Charleston accounts receivable there was a deficit of $191,051, which compared with a deficit of $81,845, after credit of $14,878 for Charleston accounts receivable paid above reserve and additional settlement received in sale, in 1931.

The company's comparative balance sheet as of Dcember 31, 1932, showed current assets of $176,203, including $77,415 cash, and current liabilities of $33,931, which compared with current assets amounts to $233,362, including $52,424 cash, and current liabilities totaling $32,947 at the end of 1931. These figures gave an indicated net working capital of $142,272 as of December 31, 1932, as against $200,415. Total assets at the end of 1932 were $2,994,424, as against $3,104,797 at the end of 1931.

The 1932 report did not state whether inventories were carried at lower of cost or market, but stated that they were carried on that basis in 1931.

N.Y. Production Club to Meet

The April meeting of the New York Paint & Varnish Production Club will be held Thursday, April 20, at the Western Universities Club, 500 Fifth avenue, this city. A round-table discussion on synthetic resins will feature the meeting. Dinner will be served at 6:30 p. m.

The American Window Glass Company's 7 percent preferred stock, par $100 has been removed from the trading list of the New York Curb Exchange.

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OIL, PAINT AND DRUG REPORTER, 12 Gold St., New York

Baltimore Paint Club Hears Anaconda Men

BALTIMORE, Apr. 10, 1933.

A largely attended meeting of the Baltimore Paint and Varnish Production Club at the Stafford Hotel April 7 had as its principal feature an illustrated lecture by officers of the Anaconda Lead Products Company, of Chicago. Mr. Anderson told about the various processes employed by the company, while Mr. Case, the sales manager, displayed the moving pictures. R. N. Brown, a third member of the Chicago group, was present mainly as a spectator. In a graphic manner, pictures and discourse presented the methods used by the company in turning out many artícles, among them zinc oxide and carbonate of lead, the relation of these products to paint pigments especially being emphasized.

In addition, a small working model of a lead mixing machine had been sent set up, and this was kept in active operation for the enlightenment and instruction as well as entertainment of the club. All of the processes fully explained and found a most attentive audience. There were four reels in the movie, the presentation of which took up one and a half hours. Incidental to the presentation of the processes involving the manufacture of paint materials there was also a demonstration of the refining of the silver and gold in the minerals used in the demonstration, a part of the exhibit that made a special appeal.

The technical committee reported through its chairman, Mr. Sutherland, on the progress made in securing papers of value to the industry for submission at future meetings of the club during the year, stating that a number had been promised and would be taken up for consideration. A supper added to the interest in the session. C. Burch Athey, of C. M. Athey Paint Company, the president, occupied the chair, and H. Braith Davis, of the H. B. Davis Company, was secretary. Leon Hanline, as chairman of the program committee, was largely credited with the success of the gathering.

Paint Convention Hotel Arrangements Completed

While in Chicago recently, attending a meeting of the local paint club, George V. Horgan, general manager of the National Paint, Oil and Varnish Association and the American Paint and Varnish Manufacturers' Association, completed arrangements with the management of the Edgewater Beach Hotel for the conventions of the associations, which will be held there October 30 to November 1. Mr. Horgan says that he is highly pleased with the facilities and arrangements offered by the convention hotel. He feels that the selection of the Edgewater Beach Hotel was a splendid one.

President Herbert A. Pinney of the Chicago Paint, Oil and Varnish Club, and his associates in office are co-operating fully with the officers of the national associations in preparation for the conventions. As Chicago will be filled with conventioners and other visitors this year, Mr. Horgan suggests that members of the national associations make their reservations at the Edgewater Beach Hotel early. Requests for reservations should be sent to J. A. Jones, manager of the hotel, and copies sent to association headquarters, 2201 New York avenue, N.W., Washington.

American Zinc Institute Will Meet on April 18

The American Zinc Institute will hold its fifteenth annual meeting April 18 in the Tavern rooms of the Hotel Commodore, this city. An invitation to attend has been extended to all the members and associates in their organizations who are interested in the work of the institute. The program for the meeting follows:—

12 noon—Reception and inspection of exhibits.

12:30 p. m.—Luncheon.

1:15 p. m.—Meeting called to order. Report of nominating committee and election of directors. Reports of president, secretary, treasurer and general review of institute's activities. Report of field work in "better galvanizing" campaign. General discussion. Adjournment and inspection of exhibits. Board of directors' meeting.

William J. Harris, vice-president and general manager of the North Bergen Varnish Corporation, North Bergen, N. J., and A. A. Morse, who has had charge of the company's publicity, have severed their connections with the company.

Dr. Carl A. Heiland, head of the geophysics department of the Colorado School of Mines, is supervising the construction of "The Scientific Divining Rod," which shows by pictures, models and machinery how present day mining is done. It is to be exhibited at the Chicago World's Exposition in June.

Trade News Briefs

A lithopone plant has been erected by the Metallhandels A. G., Budapest, Hungary, at its Nagytetenyer works. Its capacity is said to be sufficient to meet all of the domestic requirements.

The Ahumada Lead Company, Mexico, of which O. R. Whitaker is president, is selling out on a salvage basis, not being able to get bids in the usual manner. All mining claims have been turned back to the government.

Imports of black pigments into Australia totaled 24,760 hundredweights in the fiscal year 1931-32, showing an increase of 17 percent over those in 1931. The largest item was carbon black from the United States, a total of 23,695 hundredweights, valued at £34,885.

The Vane-Calvert Paint Company St. Louis, has acquired the paint department of the Condie-Bray Glass & Paint Company as of April 1. The last named company will continue its plate and window glass business which it has been conducting for the last thirty years.

The Louisville Paint and Varnish Production Club will not meet in April, having arranged to meet jointly in Cincinnati in early May with the Cincinnati, Dayton and Indianapolis Production Club. About a dozen members of the Louisville club have signified their intention of making the trip.

The Libbey-Owens-Ford Glass Company has reported a net income of $623,103 for the quarter ended March 31, after all charges, including depreciation. This was equal to 27 cents a share on 2,331,522 capital shares, against $44,231, or 2 cents a share on 2,335,342 capital shares, in the first quarter of 1932.

The Golden Gate Paint, Oil and Varnish Club at its meeting April 7 heard an unusually interesting address by Mrs. Powers Symington, who spoke on the topic, "Both Sides of the Footlights." As Maud Fay Symington, the speaker has had a close association with grand opera, music and the stage. Mrs. Symington is a sister-in-law of Marshall Dill, a member of the club. The program was arranged by Sam Abbot.

The Bigelow Brush Company's assets are to be sold April 21 at trustee's sale at the company's plant in East Baltimore, Md., under an order of the United States District Court. The plant is to be offered in entirety and then in detail, the highest total bid determining which bidder shall get it. Schedules filed in the court by the company show assets valued at $161,057, with liabilities amounting to $81,145.

French fertilizer concerns have effected a merger uniting the Union Espagnole de Fabriques d'Engrais de Produits Chimiques et de Superphosphates, the Compagnie Regionale des Engrais du Berry, the Compagnie Regionale des Engrais de l'Orleans-Beauce, and the Compagnie Regionale des Engrais de Normandie under the name of the Compagnies Reunies de Fabriques d'Engrais et de Produits Chimiques.

The Wedgewood Club, an organization of members of the Baltimore drug and allied trades, which has for its object social purposes, held an outing to Brendel's Park on Frederick Road last March 30 and evening, with a large attendance. The weather proved delightful and the occasion was much enjoyed. There were oysters in various styles and other refreshments, and most of the time proved pleasant enough to be outdoors.

A tung oil demonstration farm is being established at Picayune, Miss., by J. C. Holton, State Commissioner of Agriculture. It is near the tung tree plantation operated by Lamont Rowlands, who furnished the trees for the State farm which is designed to be a model. So far Commissioner Holton has put out 2,435 trees of the Silver Hill and Kiwana Wasse varieties which are said to have demonstrated superior resistance to cold.

The Superior Oil Corporation's receivership has been conditionally lifted by Judge Thurman Hurst in the district court, Tulsa, Okla., following an order of the Federal court dismissing a plea for a receiver. John Rogers, who was receiver, will be president; Harry H. Rogers, Perry Osborn and Patrick O'Neil are the reorganization committee. The court reserves formal discharge of the receiver until a final audit of the company is made. There are 9,000 stockholders.

Federated Oil Consumers, Ltd., has been incorporated under the laws of Alberta, Canada, with head office at Calgary, to engage in the refining and distribution of petroleum products. Provisional officers are:—President, Harold J. Maloney, and secretary, W. A. McLean. The company plans to build a 250-barrel refining plant at or near Calgary, utilizing crude purchased from independent Turner Valley producers and from Montana. Products will be marketed co-operatively.

Corn Alcohol Plant Costs

(Continued from page 16)

Equipment and Building Costs

A corn alcohol plant consuming less than 5,000 bushels of corn daily (or producing 12,500 gallons of alcohol daily) cannot economically consider the installation of equipment for carbon dioxide recovery, the production of dry feed from the slops, and the production of corn oil. Therefore, plants producing 1,000 to 5,000 gallons of alcohol daily would allow the carbon dioxide to waste into the air, would run the slop to waste or feed on adjacent feed lots, and would retain the oil germ in the feeds. Such plants would contain the following general equipment:—Attrition mills, water-heating tubs, malt and corn scales, malt and corn cookers, feed presses or screens, yeasting equipment, mash fermenters, beer stills and condensers and dephlegmator, high-wine storage kettles, high-wine stills, rectifying column, high-wine heaters, dephlegmator and condenser, receiving tanks, instruments, piping, alcohol storage tanks and scales, steam plant, denaturing equipment, and general accessories.

The use of dehydration equipment in a small alcohol plant for the production of anhydrous alcohol requires the consent of the owners of the patents, which can be obtained by a payment for the use of the patents. The matter of settlement would be determined in each individual case.

Land costs are variable, hence, data on costs of plants in this report cannot include this variable item.

The following table contains approximate cost data on the erection of several sizes of denatured alcohol plants. Due to the limiting minimum size of equipment for efficient and effective operation, a plant producing less than 3,000 gallons of alcohol per twenty-four hours, is operated a lesser length of time. For instance, a 1,000-gallon plant would operate eight hours; a 2,000-gallon plant, sixteen hours.

At present, government regulations relative to the type of building, details of construction, storage and process rooms, would either exclude the use of ordinary vacant buildings, or the cost of reconstruction and remodeling, added to old building costs, may prove an unfavorable factor in the utilization of vacant buildings for housing small industrial alcohol plants. Rentals, storage, and steam costs should be considered in calculating plant costs, even if erection of new buildings for processing and storage and the construction of a new steam plant are not contemplated. In the opinion of the writer the erection of a corn alcohol plant should be placed in the hands of competent manufacturers of alcohol plant equipment, who will guarantee an operating plant, satisfactory to government officials and to the owners.

To the erected plant cost should be added a small working capital to take care of immediate wages, notes, cash demands, etc. This may be estimated at $1 per daily gallon production. Thus, working capital charges of $1,000, $2,000, $3,000, and $4,500 should be added to the values given in table A for plants producing 1,000, 2,000, 3,000, and 4,500 gallons of alcohol respectively. That is, the total capital necessary to erect plants producing 1,000, 2,000, 3,000, and 4,500 gallons of alcohol daily would be $123,500, $149,500, $170,500, and $384,500 respectively.

It should be understood that prices given in table A are tentative only, but have been submitted by reputable organizations which have constructed industrial alcohol plants in the United States and foreign countries.

For large plants producing from 10,000 to 25,000 gallons of alcohol per day an over-all figure of $50 per daily gallon of 95 percent alcohol is a satisfactory figure to use. Such a plant is complete and is known to be satisfactorily economical On the same basis as indicated for smaller plants, the working capital added to a 10,000-gallon a day plant would make the capital requirements $60 per daily gallon.

Approximate Daily Operating Costs

Daily costs depend upon number of days a plant operates during the year. Alcohol production from corn need not be seasonal, so it is well to assume 300 days' operation per year. Included in daily costs based upon capital invested are interest at 6 percent, depreciation at 10 percent, taxes and insurance at 2 percent, maintenance and repairs at 1 percent.

Corn alcohol plants require careful supervision to get highest yields and lowest costs. The superintendent and assistant superintendent should have specialized training, with salaries approximating $4,200 and $3,000, respectively. The distiller and yeastmaker is also a specialist and would command a salary of $4,200 or more. On a twenty-four-hour-a-day, three-shift plant there would be eleven laborers per shift for miscellaneous work. The engine room would be operated in twelve-hourt shifts, requiring two men; one miller could attend to all milling required for the twenty-four hours; and one watchman would also be required. An assistant superintendent would be unnecessary in a plant operating on a single eight-hour shift a day. Therefore, the labor requirements on an eight-hour-a-day plant, or one producing only 1,000 gallons of alcohol, would be one superintendent, one distiller, one miller, one engineroom man, one watchman, and eleven common laborers. The two-shift plant would add to the above one assistant superintendent, one engineroom man, and eleven laborers. Common laborer wage should be figured at $4 per day. A bookkeeper and office supplies would add $7.50 per day. A government inspector is required at every plant where denatured alcohol alone is produced. If pure 95 percent alcohol is produced a bonded warehouse may be maintained, which would eliminate the payment of the government inspector, but a bond would be required instead.

Coal costs for steam production, steam to be used in water heating, malt and corn cookers, heating of fermenters, drying of feeds, distillation of beers for high-wines production, high-wine distillation, and like processing can be fairly easily ascertained. About eleven pounds of a good grade of coal are required per each gallon of alcohol produced. The cost of coal will vary with the locality, but a base price of $2.50 is used in these calculations.

Water costs will vary, depending upon availability and type of supply. The quantity of water used for cooking and mash dilution amounts to 25 gallons per bushel of corn. Mash cooling, condenser water, sanitation, steam, and water for cleaning and for fire protection add another 25 gallons per bushel of corn processed. The quantity required approximates 50 gallons per bushed of corn processed or 20 gallons per gallon of alcohol produced. An average figure of 10 cents per 1,000 gallons seems to be fair. Barley costs vary with price of barley; 8 pounds of barley are required for every 100 pounds of corn.

A summation of the various items for daily plant costs for small plants is given in table B considering corn costs as varying between 20 cents and 50 cents per bushel. It must be remembered that cost of land has not been figured in total investment. Items 1 to 16 are added to each one of the items 17 of cost of corn to obtain the final sets of daily costs found in items 18.

Approximate Daily Receipts

Daily receipts will depend upon price received for a value of alcohol and value of feeds. Prices on alcohol may vary between 25 cents and 40 cents per gallon. Feeds from the mash fermenters, pressed and partially dried, would yield about 10 pounds per bushel of corn. From 5 to 6 pounds of feeds remain in liquors, which feeds can be obtained only by evaporation to dryness, which operation is considered impracticable in a small plant. Incidentally, these 5 or 6 pounds constitute the more valuable stockfeeds, the yeast residues. The question of value of the feeds must be considered from two viewpoints:—(1) These feeds are valuable feeds and should be considered as worth at least as much as the grain prices per ton; (2) whether disposed of on neighboring feed lots or by partial drying, the feed value is still the same and credits for this feed should be added to daily receipts. It will be found impracticable to dump all the feeds into one feeder lot, because the removal of one bushel of refuse per animal per day constitutes a major problem of disposal and may constitute a sanitary hazard. Calculations for feed with corn at different prices introduces complex calculations; a figure of $30 per ton will be considered in these data.

Table C contains the compilation of daily receipts using values for alcohol between 25 cents and 40 cents per gallon, and 10 pounds of feeds per bushel of corn with a value of $30 per ton for the feeds. A sales cost of 10 percent has been deducted in item 3 to give the final daily receipts for each corresponding gallon value of denatured alcohol.

Table A

Erected Plant Costs

	Malting process			Amylo process.
Daily alcohol production (gallons)	1,000	2,000	3,000	4,500
Daily Corn consumption (bushels)	400	800	1,200	1,800
Hours operating per day	8	16	24	24
Cost of set of equipment without CO_2, beer slops and oil germ recovery	$65,000	$82,500	$97,500	$290,000
Boiler plant (B. horse power 500)	15,000	15,000	15,000	60,000
Feed pressing and drying equipment	12,500	12,500	12,500	30,000
Building (including 3 days' storage)	30,000	37,500	42,500	*.....
Total erected plant costs (without land costs).	$122,500	$147,500	$167,500	$380,000

* Included in $290,000 above.

Table B

Approximate Daily Production Costs

		Malt.	Malt.	Malt.	Amylo.	Malt.*
	Plant capacities, gallons per day	1,000	2,000	3,000	4,500	10,000
1.	Interest on investment (6%)	$24.72	$29.95	$34.09	$76.00	$120.00
2.	Depreciation (10%)	41.20	49.92	56.83	126.67	200.00
3.	Taxes and insurance (2%)	8.24	8.98	11.36	25.33	40.00
4.	Maintenance (1%)	4.12	4.49	5.68	12.67	20.00
5.	Superintendent, $4,200 a year	14.00	14.00	14.00	14.00	14.00
6.	Asst. superintendent, $3,000 a year	...	10.00	10.00	10.00	10.00
7.	Distiller, $4,200 a year	14.00	14.00	14.00	14.00	14.00
8.	Miller, $5 a day	5.00	5.00	5.00	5.00	10.00
9.	Engineroom men, $8 a day	8.00	16.00	16.00	16.00	24.00
10.	Laborers, $4 a day	44.00	88.00	132.00	132.00	220.00
11.	Watchman, $4 a day	4.00	4.00	4.00	4.00	4.00
12.	Bookkeeper and office supplies	7.50	7.50	7.50	7.50	10.00
13.	Warehouse bond	1.72	3.44	5.15	7.75	17.20
14.	Coal, $2.50 a ton	13.75	27.50	41.25	105.60	137.50
15.	Water, $0.10 a thousand gallons	2.00	4.00	6.00	9.00	20.00
16.	Barley, $0.35 a bushel	11.20	22.40	33.60	50.40	112.00
17.	Corn at $0.20 a bushel	80.00	160.00	240.00	360.00	800.00
	.30 a bushel	120.00	240.00	360.00	540.00	1,200.00
	.40 a bushel	160.00	320.00	480.00	720.00	1,600.00
	.50 a bushel	200.00	400.00	600.00	900.00	2,000.00
	.60 a bushel	240.00	480.00	720.00	1,080.00	2,400.00
18.	Total daily costs, corn, at $0.20 a bushel.	283.45	469.12	636.46	945.92	1,742.70
	.30 a bushel.	323.45	549.12	756.46	1,125.92	2,142.70
	.40 a bushel.	363.45	629.12	876.46	1,305.93	2,542.70
	.50 a bushel.	403.45	709.12	996.46	1,485.92	2,942.70
	.60 a bushel.	443.45	789.12	1,116.46	1,665.92	3,342.70

* Complete recovery plant.

Table C

Approximate Daily Receipts

		Malt.	Malt.	Malt.	Amylo.	Malt.
	Plant capacity, gallons a day	1,000	2,000	3,000	4,500	10,000
1.	Alcohol at $0.25	$250.00	$500.00	$750.00	$1,125.00	$2,500.00
	.30	300.00	600.00	900.00	1,350.00	3,000.00
	.35	350.00	700.00	1,050.00	1,575.00	3,500.00
	.40	400.00	800.00	1,200.00	1,800.00	4,000.00
2.	Feeds at $30 a ton	60.00	120.00	180.00	†402.00	†960.00
3.	*Daily receipts (with 10% sales deducted), alcohol at $0.25	279.00	558.00	837.00	1,527.00	3,460.00
	.30	324.00	648.00	972.00	1,752.00	3,960.00
	.35	369.00	738.00	1,107.00	1,977.00	4,460.00
	.40	414.00	828.00	1,242.00	2,202.00	4,960.00

* No distribution costs are included. These receipt data include only "at plant" prices.
† Feed yields would be 16 pounds per bushel of corn.

Economical Plant Operation

Comparing the data in tables B and C, daily costs and daily receipts, it will be noted that for a 1,000-gallon-per-day plant, operation would be at a loss when alcohol sold for 25 cents per gallon, and also with alcohol at the highest price of 40 cents per gallon the highest price payable for corn would be 52 cents per bushel. Likewise the 2,000 and 3,000-gallon plants have limiting values on selling price of alcohol and upper limit for corn.

Basing calculations on 25 cents, 30 cents, 35 cents, and 40 cents per gallon for alcohol for motor fuel blending purposes, the upper limits for prices that could be paid for corn would be as follows:—

Table D

Upper Limit for Corn Prices for Various Alcohol Values

		Price of alcohol per gallon			
		25c.	30c.	35c.	40c.
Plant capacity.	Type of plant.	Upper limit for corn prices			
1,000	Malting	$0.19	$0.30	$0.39	$0.52
2,000	Malting	.31	.43	.54	.65
3,000	Malting	.36	.48	.59	.71
4,500	Amylo	.52	.65	.76	.90
10,000	Malting	.63	.76	.88	1.00

Larger Plant Costs

The erection costs on plants of capacities ranging between 5,000 and 10,000 bushels of corn, would figure approximately $125 on the basis of one bushel of corn per day; a 5,000-bushel plant would cost $625,000 and a 10,000-bushel plant would cost $1,250,000; or, figured on the basis of alcohol production, the value of $50 per gallon per day of alcohol produced. The data given for the 1,000, 2,000, and 3,000-gallon-per-day plants show erection costs of approximately $125, $75, and $60 per gallon of alcohol per day. This comparison shows the greater economy in larger size plants.

Alcohol Fuel Defended

Dr. Henry Arnstein, consulting chemical and industrial engineer, Philadelphia, who has devoted, and is devoting, much attention to the development of alcohol plants and the production of alcohol from various agricultural products, has furnished the Reporter with the following commentary on the criticism of alcohol in motor fuels by Dr. Gustav Egloff, which was printed in the April 10 issue:—

Alcohol in Practical Use

Alcohol is now used for blending with motor fuels, or will be used in the near future as soon as the facilities are made available, in the following countries:—Argentine, Australia, Austria, Brazil, Chile, China, Colombia, Czechoslovakia, Estonia, Fin'and, France, Germany, Hungary, Italy, Japan, Latvia, Panama, Philippine Islands, Poland, Sweden, Turkey, Union of South Africa, Salvador, Peru and Uruguay.

The claim that alcohol will increase the price of motor fuel is not true. Gasoline is being sold at present prices due to the ability of the petroleum refiner to produce a large variety of by-products, and therefore his production cost and overhead is spread over a number of products in addition to gasoline. Similarly, if alcohol is to be produced out of corn, alcohol is only one of many products obtainable from the same raw material. By recovering the corn oil, the yeast, the carbonic acid, the fusel oil, the cattle food, etc., alcohol can be produced cheaper than gasoline.

The fact is that alcohol for motor fuel purposes is produced not only in countries where the law requires its use, but also in other countries. For example, in Mexico—one of the richest oil countries in the world—we have built an alcohol motor fuel plant (in Tepic), and have received repeat orders, evidencing not only the fact that our equipment and process is satisfactory, but the further fact that alcohol is an economical and efficient fuel.

Just a few weeks ago I visited the Puerto Rico Distilling Company in Arecibo, where alcohol has been in use for a number of years for motor fuel, and has proved economical and efficient—this in a country where there is no legislative compulsion. The reason that legislative action has been taken in many countries is because of the fact that small alcohol companies, as a rule, do not possess the financial resources to compete for any length of time with the large oil companies.

The statement that the oil companies "could produce, through chemical reactions, more alcohol than the combined output of all the farms of the United States" is erroneous. To produce alcohol by the hydrogenation method of cracking products of petroleum requires a very large investment, the interest and overhead charges of which is more than double the production cost of alcohol by standard methods. Alcohol can be and is being produced on a very small scale. There are plants where only a few hundred gallons are produced per day, requiring a very limited expenditure, which is not the case with petroleum cracking, which requires a very substantial investment.

I do not believe the statement either that "the United States could produce over-night twice the amount of gasoline, having more power output and more miles per hour than alcohol gasoline blends." The truth is that while the United States produces about two-thirds of the world's oil supply, we are already importing very large amounts of crude oil, refined oil, and ready-made gasoline. Extensive drilling and competitive storing of petroleum above the ground have brought about unbearable competition in the oil industry. Gasoline is now quoted in trade journals at between 2⅛ cents and 2⅝ cents per gallon.

On the other hand, according to the statistics of the United States Department of Commerce, in the year 1930 the United States imported 710,925,600 gallons of ready-made gasoline at a cost of $58,604,080.00, and in 1931, 572,096,910 gallons at a cost of $35,069,009.00. Therefore, the average cost per gallon of gasoline paid by the importers was approximately 7.2 cents. This, as stated, is the cost to the importers, given under oath for customs purposes. Surely they would not import gasoline at higher prices than it could be produced for in unlimited amounts at home if they did not have something up their sleeve.

Evidence of Efficiency

The statement that gasoline gives more miles per gallon is not true. In the following I shall quote some European experts to prove that the contrary is true:

Zeitschrift fuer Spiritusindustrie, of August 7, 1930, states:—

"The oil interests of Germany as elsewhere are carrying on an unjustified propaganda to discourage the use of alcohol for motor fuel purposes. That is natural. It is to their interest to sell gasoline and every gallon of alcohol used for motor fuel purposes means a corresponding decrease in sale of gasoline."

In the same journal, in the August 23, 1931, issue, is quoted Professor Hubendick, of Stockholm, Sweden, internationally known fuel engineer of the Stockholm University, who spoke August 19 before the German Engineering Society, as follows:—

"Not only technical questions had to be solved, but also important and serious business problems. The oil companies' representatives joined forces with the importers of gasoline to fight and if possible to eliminate alcohol from this highly profitable, competitive field. . . . They tried to eliminate competition, not always by honest and by ethical methods, as they had ample funds, evidently supplied by the immensely wealthy foreign oil producers. . . .

". . . Here in Germany my attention was called to some rumors according to which by the use of 'Lettbentyl' in Sweden unsatisfactory results were obtained. It is claimed the fuel consumption is greater, the engine wall and the piston becomes corroded and other unusual wear and tear occurs; it is claimed that acetic acid is formed which affects the engine; the oil consumption is greater and the power output reduced; the engine does not start easily, especially in Winter time. Let me assure you, gentlemen, that all these claims are false. There is not an atom of truth in them. The experience throughout Sweden has been highly satisfactory with alcohol blended fuels. Since we use 'Lettbentyl' we are having considerably increased engine performance, which is obtained by the use of less fuel than previously. The engine starts very readily. The oil consumption is normal or slightly less than when using gasoline. There is no acetic acid formation, no corrosion, and no wear and tear which is not present when using gasoline. The results in Winter are equally satisfactory and superior to the performance of gasoline under the identical circumstances. This is not only my own judgment but the unanimous opinion of the several hundred thousand users of 'Lettbentyl.' All the benzine importers are selling today 'Lettbentyl' and substantiating the superiority of this fuel.

"I heard, here in Germany, that by the use of alcoholic motor fuels it is claimed the motor becomes overheated, causing sparkplug and valve trouble. If such observations had been made, I can assure you, gentlemen, that the very same engine if operated with gasoline would have become overheated and shown the same difficulties with the valves and sparkplugs. These difficulties were not due to the fuel but were due to construction difficulties or to negligence in previous maintenance."

I shall quote a few pertinent statements to show that alcohol is a superior fuel, or at least under the worse conditions equal to the best grade of gasoline.

In a pamphlet, "The Spirit of Australia," published by the Australian National Power Alcohol Company, it is reported:—"With the use of 'Powrac' power Alcohol we claim:—(1) The absolute elimination of knocking or pinking. In-

creased power on hills and under heavy load. A clean engine. (2) Marked economy in lubrication. Surprising flexibility in running. Greater safety."

Zeitschrift fuer Spiritusindustrie of January 12, 1927, published the following—

". . . It will be of interest to quote the excellent results obtained in Germany on June 13, 1926, during the Avus Races where the first prize was won by an automobile propelled with 'Monopolin,' a German alcohol-gasoline mixture. The first prizes on May 30, 1926, in Dusseldorf, during the Gesolei Races were also captured by alcohol-fuel-propelled automobiles. Similarly, at the Hohensyburg Races on June 5, 1926, the first prize for speed and power had been won by automobiles operating with alcoholic motor fuels. . ."

Zeitschrift fuer Spiritusindustrie (November 3, 1927) reports that "The general automobile races held under the auspices of the German Automobile Club on October 16, 1926, have proven that the greatest speed ever developed by an automobile was obtained by the use of alcoholic motor fuel. Four first prizes, four second prizes, and one third prize have been won by automobiles using alcoholic motor fuels."

Zeitschrift fuer Spiritusindustrie (Vol. 1, No. 28), under the heading "New Racing Achievements With Monopolin" says:—"During the large races in Baden-Baden held on the twenty-sixth and twenty-seventh of June, six prizes were won by alcohol-propelled cars, not only on flat roads but also on mountain racing where in addition to speed, also power had to be demonstrated, alcohol fuels proved superior. . .

". . . Geza Glaser reports to the Hungarian government in an official report dated July 19, 1928, as follows:—

". . . A gasoline tractor was fitted out with a double plow while the alcohol tractor with a triple plow. A large stubble-field was tilled with the following results:—

	Alcohol-gasoline.		Gasoline.	
Depth of furrow.	19.55		19.23	
Average width of trench	98.2	cm.	61.5	cm.
Average speed of ploughing	1.53	sec.	1.28	sec.
Per hour ploughed	0.541	ha.	0.283	ha.
Fuel consumed.				
Petroleum	4.57	Kgr.pr.ha.	28.5	per ha.
Alcohol	15.23			
Total fuel Krg.	19.80	per ha.	28.5	per ha.

This clearly shows that the alcohol-driven tractor ploughed practically twice as much per hour, and consumed about 40 percent less fuel. Not only did the petroleum-driven tractor consume about 50 percent more fuel than the alcohol-driven tractor; but it also ploughed about half of the acreage of the alcohol-driven tractor.

Experience in Philippines

The Planter and Sugar Manufacturer of June 15, 1929, reported:—The production of power alcohol in these islands [Philippines] has assumed large proportions during the past five years. As gasoline retails for 40 cents gold, power alcohol, which is a mixture of ethyl alcohol and ether finds a ready sale at lower prices. Alcohol can be manufactured at about 9 cents gold per gallon. Ether can be made at 14 cents gold per gallon. There is a government tax on power alcohol, but this fuel can be produced at about 11 cents gold per gallon. Nearly every central uses alcohol for fuel in tractors; many planters throughout the islands are now using this fuel in tractors. There are three companies utilizing molasses and some seven centrals have erected distilleries.

"Through the use of molasses for the production of power alcohol, the industry has gradually assumed large proportions. A company has been organized to export this waste product to China and European ports.

". . . Pure Cane Molasses Company, a subsidiary of the United Molasses Company of London, has been organized to carry on the exportation of molasses in the Philippine Islands. The first shipment by this company was made on May 5 and consigned to an alcohol-producing company in Hong Kong, China. This first shipment amounts to 8,500 metric tons."

E. Mayer, professor of the Polytechnic in Berlin, is quoted in the journal of the German engineers, as follows:—

"The average gasoline engine using alcohol will utilize 150 percent more of the heat units when operated with alcohol than when operated with gasoline. The very same engine will yield twice the thermal efficiency when the engine is operated with alcohol."

Professor Mayer further states:—

"An additional advantage possessed by alcohol over petroleum as motor fuel, is the fact that the fire hazard is greatly reduced, it also being an incomparably cleaner fuel. Due to the incomplete combustion of benzine, petroleum motors require frequent cleanings to remove the residual carbon. The exhaust contains foul-smelling, oil decomposition products. By the use of alcohol the engine remains clean and the exhaust gases are also pure and practically odorless. By complete combustion in a suitable motor the power output and the safety of operation is incomparably greater when using alcohol instead of benzine.

"By the use of a pure alcohol, even if same is diluted, containing water, there is no rust formation in the engine. The superiority of alcohol over the other liquid fuels used for internal combustion engines is so great that alcohol is in a class by itself. The utilization of the heat energy places the alcohol motor far above any motor operated with any other liquid hydro-carbon fuel. . . ."

Zeitschrift fuer Spiritusindustrie, August 7, 1930, states:—

"The oil interests of Germany as elsewhere are carrying on an unjustified propaganda to discourage the use of alcohol for motor fuel purposes; that is natural. It is to their interest to sell gasoline, and every gallon of alcohol used for motor fuel purposes means a corresponding decrease in sale of gasoline. The German Chamber of Commerce has therefore called upon the outstanding authority, Professor Wawrzinick to give a scientific opinion on alcohol as motor fuel. Professor Wawrzinick is the greatest living authority on internal combustion engines, and is director of the Royal Technical Institute of Dresden which specializes in automotive and motor fuel sciences."

The professor states:—"Properly produced motor fuel alcohol is equal to the best gasoline from every point of view." He quotes a report from the Kraftverkehrsgesellsaft Freistadt Sachsen (Power Distributing Company of the Free City of Sachsony) as follows:—

"We certify that in our transportation facilities, consisting of 500 buses, 100 trucks and 34 passenger automobiles, we use only a gasoline-alcohol mixture for fuel purposes.

"We operate a large variety of automotive engines and for the past five years have exclusively used 'Monopolin', which contained 70 percent gasoline and 30 percent alcohol.

"You will appreciate in such a large institution accurate records of fuel consumption and performance are kept, which in the years have demonstrated that the combustion of this fuel is perfect and pure. There is an absolute absence of knocking and corrosion of the engines, with an appreciably greater engine performance over automotive engines operated by other fuels. The fuel costs, by the use of 'Monopolin,' were considerably less than by the use of other fuels, and no parts of the engine had been attacked by this fuel.

"Before using 'Monopolin' it was necessary to give a thorough overhauling to the engines after 50,000 kilometers, while today, with the alcoholic motor fuel in use, such overhauling is not necessary, only after 80,000 kilometers and over. By the use of this fuel the oil consumption is lighter and there is considerably less crankcase dilution than by the use of the other motor fuels.

"We are satisfied with 'Monopolin' and will not consider the use of other motor fuels. . . ."

Experience in Sweden

Professor Hubendick of the Polytechnic of Sweden has stated as follows:—

". . . The oil companies' representatives joined forces with the importers of gasoline to fight and if possible, to eliminate alcohol from this highly profitable, competitive field. They looked upon the mixture consisting of three parts of gasoline and one part of alcohol as the opening wedge, which will later completely replace gasoline. They tried to eliminate competition, not always by honest and by ethical methods, as they had ample funds —evidently supplied by the immensely wealthy foreign oil producers—and the alcohol people were at great disadvantage in fighting against unsurmountable odds.

"Most of these difficulties are fortunately today eliminated, and the situation is more hopeful. The motoring public and even the importers of benzine have experienced that a combination of 75 percent of benzine and 25 percent of alcohol produces a superior motor fuel with great antiknock properties, with increased motor performance, and reduction of fuel consumption. This mixture, under the trade name of 'Lettbentyl,' had established itself an excellent reputation. The importers of benzine appreciate today that industrial alcohol is not competing with it, but is a partner which improves the performance of benzine and enables its easier sale and in larger quantities; thus, we have a happily married alcohol-benzine fuel in Sweden today.

". . . The demand for 'Lettbentyl' is actually greater than the supply and today the importers of benzine are urging the greater production of alcohol and are insisting on obtaining larger quantities of alcohol. The importers of gasoline have prepared a memorandum for the government for rationing the alcohol to lead to a more uniform and general distribution of alcohol, which naturally reduced the proportion available. All benzine importers are distributing 'Lettbentyl,' and one of the largest gasoline importers states that 'We are forced to have at all times "Lettbentyl" in our pumps, as otherwise the motorists refuse to purchase our gasoline, and go to another pumping station, where this motor fuel is available.' "

After this review of the development of the Swedish motor fuel industry, Professor Hubendick turned to the technical consideration of the subject. He described the properties of various alcohol and gasoline mixtures, refuting the frequently heard statement that alcohol absorbs water from the air. He proved that concentrated alcohol does not absorb more moisture than ordinary alcohol. It had been demonstrated that 95 percent alcohol can be efficiently used without any detriment to the engine, and from practical standpoint a dilution of this alcohol is never taking place, and this is precisely the case with the concentrated alcohol.

Professor Hubendick further stated:—

"We in Sweden have accumulated very thorough experience by the use of 'Lettbentyl,' which had been in use for several years. This fuel contains 25 percent of alcohol and 75 percent of gasoline. This fuel can be used for all purposes replacing the very best grade of gasoline. The early fears that some difficulties may develop by the use of this fuel during the severe winter months has luckily proven groundless; 'Lettbentyl' requires no more preheating in the severest weather than gasoline.

". . . It is a well-known fact that alcohol is an excellent antiknock fuel. No doubt the excellent results obtained in Sweden by the use of 'Lettbentyl' have been due in some measure to this property. Most of the modern carburetors (like that built by Ricardo) require greater compression than is possible with ordinary gasoline. The addition of alcohol to such a gasoline increases its anti-knock value and it may be safely used in an engine designed for higher compression than that required for ordinary gasoline. The engine will run smoother with a greatly increased power utilization co-efficient. This will explain that every user of 'Lettbentyl' will certify that his machine is developing more power and fuel consumption in liters per kilometer is less than when he used gasoline.

". . . I am satisfied that the entire world—even countries rich in oil resources —will soon use alcohol to improve their gasoline to enable the use of engines with greater compression and to obtain greater efficiency and better motor performance. . . ."

Separation Charge Disputed

It is not true that "there are a number of difficulties involved in the use of alcohol with gasoline based on the strong tendency of alcohol to separate out."

Alcohol of 75 to 95 percent is not the alcohol we use for motor fuel purposes any more than a boy in the kindergarten is a college professor or qualified to perform a major surgical operation. A standard alcohol of 96 to 97 percent does produce a satisfactory and homogenous blend with gasoline, but gasoline is not a standard product. Its chemical and physical properties vary according to the petroleum from which it is distilled, and also is subject to a great deal of variation when produced from the very same petroleum is the distillation or cracking is done at higher temperatures or different methods.

Alcohol containing water will separate when mixed with the poorer grades of gasoline distilled at higher temperatures. Therefore, to make alcohol thoroughly soluble in gasoline, two standard methods have been adopted and in use for almost twenty years. By one method part of the alcohol is transformed into ether. An ether, alcohol and gasoline blend will make a thoroughly satisfactory mixture from which the alcohol will not separate even at minus 80°. Such etherized alcohol is in use today in a number of countries. The difficulty originally experienced by the use of ether was due to the fact that ether boils at a very low temperature, and therefore its condensation in Summer in tropical countries, where the water temperature is high, entails some difficulties. These difficulties, however, have been now entirely overcome, because during fermentation carbonic acid gas is generated, and by partial compression of the carbonic acid gas sufficiently low temperatures are produced practically without cost, which will insure the condensation of ether irrespective of atmospheric temperatures.

At the same time, various methods have been worked out by which standard commercial alcohol containing from 3 to 5 percent of moisture is dehydrated completely, producing an absolute alcohol, or at least a nearly absolute alcohol containing less than 0.5 percent of water.

Today we have equipment which enables us to produce directly out of the mash such absolute alcohol at a trifling cost. An absolute alcohol is mixable in all proportions and at all temperatures with gasoline, and will not separate at very high or at very low temperatures.

The report from Sweden, which we have quoted above, indicates that in a country where the use of alcohol blended fuels is optional with the individual, and not compulsory, alcohol blended motor fuels have entirely replaced "Esso" and other anti-knock compounds which previously were imported into the country.

Surely Dr. Egloff could not have meant what he is reported to have said, that "the average gasoline produced today is too good for the average motor car, which operates at too low combustion pressure to utilize it to the best advantage."

In order to increase the efficiency of a motor car the fuel must be exploded at the highest possible pressure. With increased pressure greater efficiencies are obtained. The average gasoline cannot be burned at higher combustion pressure without preignition and knocking taking place. Therefore, to be in position to obtain greater efficiencies, that is to say, more miles per gallon, the oil companies hit upon the idea of adding to the gasoline tetraethyllead. The truth is that some of the oil companies are not willing to admit that alcohol is a satisfactory fuel, but as from the two quotations previously given it is evident that alcohol is not only a cleaner and safer fuel than gasoline, but also a more efficient fuel, and it is the alcohol in the tetraethyllead which gives the gasoline antiknock properties, enabling its use at higher pressure.

Comparative Efficiencies

Alcohol is by far the most satisfactory antiknock compound known to science. The following table, originating with the Bureau of Mines, and published about twenty years ago when a poorer grade of alcohol was available, when the tests were made with alcohol containing water and when a much superior grade of gasoline was available, indicates that the thermal efficiency and the fuel consumption at elevated pressure is very much less with alcohol than with gasoline. When one pound of alcohol and one pound of gasoline are completely burned the following numerical relations are independent of the type of motor used:—

	Alcohol.	Gasoline.
Minimum sufficient amount of air	*9 pounds.	†15.3 pounds.
Carbon dioxide in exhaust	1.9 pounds. 15.9 cu. ft.	3 pounds. 25.1 cu. ft.
Nitrogen in exhaust.	6.9 pounds. 90.6 cu. ft.	11.8 pounds. 155 cu. ft.
Water condensed from exhaust	1.2 pounds.	1.5 pounds.

* 117 cu. ft. at 150 C. and 760 mm. pressure.

† 198.9 cu. ft. at 150 C. and 760 mm. pressure.

It is observed that there are 5 pounds more nitrogen in the exhaust from 1 pound of gasoline than from 1 pound of alcohol. This means an additional loss of heat in exhaust and a tendency to cause incomplete combustion, owing to dilution, in the case of gasoline.

Results from tests made on from 10 to 15 horsepower Nash and Otto stationary engines:—

	Compression pressure.	Fuel consumed per brake, lb.	H.P. per hour, gal.	Thermal efficiency (percentage).
Gasoline ...	70	0.60	0.100	26
	90	.58	.097	28
	70	.96	.140	28
Alcohol ...	180	.71	.104	39
	200	.68	.099	40

Tests made by the United States Post Office using alcohol as motor fuel at various speeds in thirty-one nonstop flights between New York and Washington, gave the following results:—

R.P.M.	1440-1460	1,475	1,500
Gasoline consumed (gallons per hour).		24	24.17
Alcohol fuel consumed (gallons per hour)	15.9	20.1	21.5

The following is a comparative analysis of lubricating oil consumption (gallons per hour) at different engine speeds:—

R.P.M.	1440-1160	1,475	1,500
Gasoline		4.65	4.95
Alcohol	4.5	4.2	4.2

Strong and Stone, in Bureau of Mines Bulletin No. 32, published in 1911, observed that:—"Denatured alcohol more nearly approaches the ideal fuel than does gasoline, for at any one compression it shows a greater efficiency. . . . A gasoline engine having a compression pressure of 70 pounds, but otherwise as well suited to the economical use of denatured alcohol as gasoline, will, when using alcohol have an available horsepower about 10 percent greater than when using gasoline."

Eugene H. Leslie, in his book, "Motor Fuels," says:—"Alcohol can be burned under two or three times the maximum pressure under which gasoline can be used with avoidance of the fuel knock. The greater efficiency resulting from the increased compression makes up for the lower available energy of the alcohol. . . . Alcohol is safer to handle and transport than gasoline because of its lesser volatility and because it is miscible with water. A gasoline fire is spread by the use of water in any attempt to extinguish it, but alcohol fires are readily extinguished with water."

He further states, that:—"The value of alcohol as a fuel has been amply demonstrated"—and this was written in the year of 1923. Then, discussing various composite fuels containing alcohol, he further states:—

"Tests conducted by the Bureau of Standards showed that the thermal efficiency of an airplane engine was 15 percent greater when using airplane 'Alcogas' than when using aviation gasoline. The higher heating value of the gasoline is offset by the more efficient utilization of the 'Alcogas,' so that, volume for volume, the effective or useful work obtainable is the same for both fuels. However, it was the opinion of the operating engineers that the engine ran more smoothly with 'Alcogas.' The main advantage of 'Alcogas' was the freedom from knocking at ground level, even when the compression ratio was 7.2 and the trottle wide open. . . . An important advantage of 'Alcogas' over gasoline, noted in the tests made by the United States air mail service, was the 40 percent lower consumption of the lubricating oil and the less dilution of the lubricating oil by 'Alcogas. In five hours of running the oil used to lubricate a Hispano-Suiza engine was diluted only 0.97 percent when 'Alcogas' was used as a fuel, but 6.3 percent when gasoline was the fuel used."

Lesslie further writes:—" 'Natalite' can be used as fuel with carburetors and engines designed to burn gasoline. [Natalite' is an alcohol-ether mixture used in South Africa.] . . . that it does not cause corrosion; that it will not freeze at any temperature encountered in using fuels; that its use allows of easily starting the engine; and that it is generally satisfactory."

Frosting Avoided

In the last quotation there is a reference to "Natalite," that it will not freeze at any temperature encountered in using automotive or airplane fuels, so it will be of interest to quote the following from the December issue of the news edition of *Industrial and Engineering Chemistry* (Dec. 20, 1931):—

"Long aerial flights have recently been seriously interrupted by frosted carburetors. The frosting is due to the effect of low temperatures on the gasoline, for the fuel contains hydrocarbons with low boiling points. Mr. Baron has studied mixtures of gasoline and benzene and absolute alcohol—mixtures which have proved free from the occurrence of frosting. In using proportions of 70 percent gasoline, 20 percent benzene, and 10 percent absolute alcohol, a fuel can be obtained, which, at least at —30° C., gives no indication of the frosting phenomenon."

As far back as in 1920 the July issue of *Sugar* of that year summarized the advantages of alcohol fuels over gasoline as follows:—Greater mileage; no preignition; no knocking; more uniform application of power during the power stroke of the piston; more power; power completely under control; lower heat or combustion, etc.

Alcohol is satisfactorily used at compression pressures of 200 pounds, while the highest compression pressure in the present-day automobile is still less than 100 pounds.

Uniformity of Alcohol

The last statement that future gasoline will operate at higher speeds is only partially true. Higher speeds and higher pressure will be obtained by the use of gasoline only by mixing it with alcohol, and the superiority of alcohol being thus apparent, the argument which Dr. Egloff presents against alcohol is exactly the argument which can be used in its favor.

He says, "Alcohol blends cannot do this, because alcohol is a chemical individual which cannot be changed in its properties." Precisely so. Gasoline, as previously said, is not a standard product. Its properties change according to the process employed in its production, while if alcohol is satisfactorily made, irrespective of geographich locations where plants may be operated, irrespective of the raw material—whether cereal, molasses, or wood waste is used in its production—the properties of the alcohol will be always the same, and therefore the engine designer will have less difficulty in designing a suitable engine from which the highest efficiencies can be obtained. Indeed, if a suitable engine is designed, based on the knowledge of the standard properties of alcohol, the thermal efficiencies obtainable from such an engine can be increased by at least 50 percent.

Future generations yet unborn need oil. Alcohol is not to replace gasoline, but to be used in conjunction with gasoline. As

Professor Hubendick said, alcohol is the best friend of gasoline. It gives it superior qualities and enables the extension of its use in the future. The fact remains that the entire world has gone into the development of its agricultural resources. The United States will find it increasingly difficult to dispose of its agricultural surpluses, and there is no other solution to the question than its diversion into alcoholic motor fuels.

It is to the interest of the country in general and of the petroleum refiners in particular to create a prosperous farming group which will, by more extensive cultivation of its land, be in position to use a greatly increased amount of motor fuel. It is better to have 90 percent of the motor fuel consumption of a prosperous country than to have 100 percent of a bankrupt country's motor fuel consumption, the purchasing power of which country has vanished, and whose total business at 100 percent gasoline fuel may be only a small fraction of the 90 percent output of a prosperous country.

Personal Paragraphs

James A. Mawn, of the Gulf Refining Company's Boston office, has been elected a director of the Boston Credit Men's Association for three years.

Charles W. Ryans, sales manager for the Strassel Gans Paint Company, Louisville, is a candidate for mayor of Louisville, on the Republican ticket.

Frank A. Roche, of the Wadsworth, Howland & Co., paint manufacturer, Boston, has been elected a director of the Boston Credit Men's Association for three years.

A. J. Doremus, manager of the export division of the Sterling Refining Company, refiners of petroleum solvents, Tulsa, Okla., has returned to New York from an extensive trip to Tulsa and Oklahoma City, as well as to the oil fields in Texas, to New Orleans, Chicago and Pittsburgh. He reports a decidedly better feeling prevailing in the South and Southwest in his line of endeavor.

Dr. Lyman J. Briggs has been nominated by President Roosevelt to be Director of the Bureau of Standards, a post which he has filled as acting director since the death of Dr. George K. Burgess in July, 1932. Dr. Briggs, whose home is in Michigan, has been in the government's scientific service for more than thirty-five years, and for several years past has been assistant director of the Bureau of Standards.

C. G. Sheffield, vice-president of the Standard Oil Company of New Jersey (Delaware), has been placed in charge of the company's retail sales, while wholesale sales will be in charge of John E. Skehan, who has been heretofore a vice-president of the Standard Oil Company of Louisiana. E. A. Holbein, a director of the Standard Oil Company of New Jersey (Delaware), has been made manager of tankcar sales.

Dr. G. A. Goodell, vice-president of the Kentucky Color & Chemical Company, at the invitation of Dr. A. W. Homberger, head of the chemistry division, University of Louisville, will deliver a talk April 21, at the Brown Hotel, before the Kentucky Chemistry Teachers' Association, division of the Kentucky Educational Association, holding its annual meeting in Louisville. His subject will be the manufacturing of dry colors.

W. J. Schieffelin, jr., president of Schieffelin & Co., wholesale and manufacturing druggist, this city, in a letter to the retail druggists served by his company, has made a strong and able plea that credit-hoarding be stopped; that full co-operation be given in the practical relieving of business restrictions; and that a courageous effort be made to build on the national foundation whose strength and reliability have been proved.

James T. Menefee, of the Merchants & Manufacturers Paint Company, Louisville, chairman of a special committee of the Louisville Paint, Oil and Varnish Club, in charge of arrangements for the paint up and clean up campaign, reports that dates selected are April 24 to May 6, and that the money for advertising and promotion has been subscribed. The Better Painted Louisville program was dropped for this year. Governor Ruby Laffoon, of Kentucky, has issued a proclamation, establishing these dates for what he termed a "clean up and fix up week."

A. D. Aitken has resigned as vice-president of the Midwest Oil Company, and H. H. Brooks has resigned as secretary-treasurer of the Salt Creek Producers' Association as of March 25. Both companies were controlled by the Midwest Refining Company, which was absorbed by the Standard Oil Company of Indiana. Mr. Aitken will hold an office and will be a member of a directorate of the company, Mr. Brooks remaining as a director of the Salt Creek group. A. R. Kline, of the auditing department of the Midwest Oil, was appointed vice-president and treasurer of Midwest Oil and treasurer of Salt Creek Producers. Miss L. G. Grosier, who was attached to the executive office, was named secretary and assistant treasurer of both concerns. Thomas A. Dines is president of the two companies.

American Chemical Society Papers

[Continued from April 10 issue. The Reporter will be glad to endeavor to get further information on any of the subjects for readers who are interested in them.]

Some 500 papers were presented before the several divisions of the American Chemical Society in its meeting in Washington, March 26 to 31. A number of these papers of industrial interest have been selected for presentation in abstract to readers of the REPORTER. The abstracts below are additional to a number printed in the April 3 and 10 issues. Others will be printed in subsequent issues.

Cellulose

Alphacellulose from Farm Wastes

Mrs. Mary T. Kanagy, H. A. Hamm, and S. F. Acree

A good yield of cellulose of high alpha content (90-98 percent) can be obtained from such farm wastes as cornstalks, straw, etc., by simple processes which permit the recovery and possible subsequent commercial ultilization of the accompanying constituents such as gums, xylose and other carbohydrates, lignins, organic acids, etc. The method consists of removal of extraneous dirt by washing the coarsely disintegrated material, and then cooking it at 110-115 deg. C., successively, with water, dilute acid, and dilute alkali, followed by chlorination of the pulp, extraction of the chlorinated products with dilute alkali, bleaching with hypochlorite, digestion with cold, dilute acid to remove mineral matter, and finally washing and drying the purified white cellulose.

Dyeing Cellulose Materials

R. E. Rose

It is well known that materials composed of cellulose differ very markedly in their behavior during the dyeing processes. Thus, even mercerization changes the dye index of the fiber very distinctly, and the change becomes still more marked when the cellulose is completely disintegrated, as far as its structure goes, and then regenerated as rayon. The very dyestuffs that have the greatest affinity for cotton show very poor affinity for rayon, and yet both materials are cellulose. In the same way, paper will dye very differently according to the extent to which the cellulose has been broken down during beating.

The material in all these cases is essentially chemically similar, but dissimilar in structure; therefore, the observations made, on the relation between dye structure and behavior in dyeing cellulose in its different forms, should be of direct value in any consideration of the structure of cellulose.

Finally the conversion of cellulose into any product in which the hydroxyl groups are etherified or esterified changes the characteristics of the fiber completely. An effort was made to describe the essentials of the dyeing processes sufficiently to make clear why the different behavior of different dyes does constitute a real contribution to our knowledge of the constitution of cellulosic materials.

Pimaric Acids from Pine Gum

S. Palkan and T. H. Harris

The resin acids (in contradistinction to the acids in rosin) of American pine gum, from which the bulk of the world's supply of rosin and turpentine is obtained, have received very little study. An investigation of the acid portion of *Pinus palustris* gum is here reported in which it is shown that there are present appreciable quantities of a levo-pimaric acid (apparently identical with the one found in *Pinus maritima*—principal French gum), and a dextro-pimaric acid which differs markedly in properties from that reported in *Pinus Maritima*. The two acids are probably present in a ratio of two parts of levo to one of dextro. The latter acid is thought to be in a higher state of purity than that from *Pinus maritima*, rather than an isomeric form. An improved systematic procedure was described for obtaining the pure pimaric acids from the gum.

Colloid

Silicic Acid Gels Setting

Charles B. Hurd

Various theories for the formation of gels of silicic acid suggest the important effects of certain constituents of the mixture, in addition to the obvious effect of the concentration of silica. Among others suggested are the concentrations of the sodium ion (Kroger) and excess acid (Holmes). Results obtained in this laboratory [Hurd and Miller, J. Phys. Chem., *36*, 2194 (1932) and Hurd and Carver, J. Phys. Chem., *37* (1933) in press] suggest the great importance of the pH of the mixture upon the time of set. A comprehensive study of the effect of the pH on time of set of mixtures of solutions of sodium silicate and acetic acid is under way in this laboratory. In such a study it becomes necessary to know the effect of each constituent of the mixture, because the pH of the mixture can be changed only by changing the concentrations of sodium acetate and acetic acid. Some of the results obtained in this study are presented in this paper, notably the effects of sodium acetate, acetic acid, and sodium ions.

Alkaline Salts Detergencies

Foster Dee Snell

Experimental washing by a modified Rhodes and Brainard procedure gives reproducible results in the same laboratory. A soap builder alone is primarily a detergent only to the extent that it can react with free fatty acid in the soil to produce soap. Secondarily it may be effective due to improved wetting power of the detergent solution. One of the important functions of a soap builder is to speed up detergency. This may be expressed as a measure of the rate of removal of soil. Under specific conditions with low acidity of the soil, 0.1 percent soap and 0.1 percent soda ash is less efficient than 0.1 percent soap alone, and 0.1 percent soap and 0.1 percent metasilicate is more efficient than 0.1 percent soap alone. This cannot be expected to hold for all acidities of the soil. The hydroxyl-ion concentration of the builder solution should be relatively large and the sodium-ion concentration relatively small.

Based on several factors, the order of decreasing value as detergents of the builders studied is sodium orthosilicate sodium metasilicate, a mixture of sodium metasilicate and soda ash, sodium hydroxide, modified soda, and soda ash. The behavior of colloidal soap builders is clearly distinguishable from that of noncolloidal soap builders. Acidity of dirt increase the ease with which it is removed.

The theory is advanced that the efficiency of the different builders with soap is some positive power of the number of units of brightness regained in washing. It is estimated as not less than the second or greater than the third power. The major factors in detergency are mechanical action, wetting power, deflocculating power and emulsifying power, the later two possibly appearing under another name. The data are in agreement with the micelle theory of detergency.

Wetting Agents Tested

Harvey A. Neville and Charles A. Jeanson, 3d

A number of the sulphonates of the benzene series have been prepared and the effect of the nature and position of substituent groups upon their surface activities has been studied. The surface tension-concentration relations of these products are compared with those of soap and other wetting agents. The adsorption of some commercial wetting agents by wool has been measured in solutions having various hydrogen-ion concentrations. It is shown that, for substances of this type, the adsorption parallels the potential curve of the wool in acid solutions and is negligible in alkaline solutions. The influence of wetting agents upon the take-up of acid andbasic dyes by wood at various hydrogen-ion concentrations has been determined quantitatively. These agents increase the take-up of basic dyes in acid solution and decrease dyeing under other conditions. The results are interpreted in terms of the electrical condition of the fiber and the adsorption of the capillary-active ions.

Dye

Laccaic Acid from Lac Dye

Paul E. Spoerri and William H. Gardner

Although lac dye at one time was a widely used commercial product, the chemistry of laccaic acid, its coloring principle, never received much attention. The only two investigators, R. E. Schmidt and O. Dimroth, who have given it any great consideration do not agree as to its formula. To isolate this dyestuff in pure form is a very difficult and tedious task. It is doubtful if either Schmidt or Dimroth ever obtained it in very high state of purity. This paper discusses the various methods which have been employed in attempts to isolate laccaic acid from both stick-lac and a commercial sample of lac dye. A simplified method is described permitting to obtain 9 percent pure laccaic acid from lac dye. Until all the contaminating nitrogenous material is removed, it is impossible to obtain the dye in crystalline form, even as a crude product. Even after this has been successfully accomplished it requires many recrystallizations to remove traces of contaminating inorganic material. Both these sources of contamination have been previously overlooked. Laccaic acid forms lakes with heavy metals, so that these cannot be used as a means for purification. It is doubtful whether either formula assigned to this substance is correct. The work of Schmidt is of greater merit than that of Dimroth, in spite of the fact that the latter author carried out his investigations nearly twenty-five years later.

Aluminum Chloride ir. Keto Synthesis

P. H. Groggins and R. H. Nagel

The effect of the size of the aluminum chloride particles in carrying out the Friedel and Crafts synthesis of 4′-chloro-2-benzoylbenzoic acid is closely related to the efficiency of the agitation provided. With better agitation, particles up to the size of a pea have been used with equal success in the preparation of the keto acid. Removal of the liberated hydrogen chloride gas from the reaction chamber increased the yield.

Ketonimine Dyestuffs and Derivatives

D. F. J. Lynch and J. David Reid

In a study of auramine (4,4′-tetramethyldiaminobenzophenonimine hydrochloride) and related compounds, with a view to developing improved bactericides, three new methods of preparing auramine or its base in solution were devised. Five new organic acid salts of auramine base, a synthesis of benzophenonimine and its new benzoic acid salt, and three new salts of 4:4′-diaminobenzophenonimine are described. The new oxime of 4:4′-tetraethyldiaminobenzophenone was prepared both from the ketone and the thioketone. The new 4:4′-tetraethyldiaminothiobenzophenone was described. The synthesis of the new compounds; 4:4′-tetraethyldiaminobenzophenonimine, and five salts of it, are described.

Thioindigo Isomerism and Color

M. L. Crossley

It is well known that substitution in the thioindigo nucleus has a marked effect on the color produced by the thioindigo dyes. A study of the known products brings out certain correlations of interest. The position of the substituent with respect to the sulphur or carbonyl groups is of prime importance in determining both color and solubility of the leuco compounds. As the number of substituents increases, the solubility is reduced to such an extent that the products are no longer capable of dyeing fibers. Tetrachlordimethylthioindigo has been synthesized and shown to be useless as a dye, since its leuco compound is insoluble.

Benzothiazole Dyestuffs

M. L. Crossley

A series of dyes containing 1-anilinobenzothiazole and 1-anilinobenzoxazole nuclei has been synthesized. It is found that mercaptobenzothiazole condenses with arylamino compounds to give the corresponding anilinoarylthiozoles. These products can be nitrated, reduced, and the amine compounds coupled with phenols and naphthols to produce dyes of varied hues on animal fibers. They can also be used as developers for betaoxynaphthoic acetanilides and varied colors produced on cotton. In a similar manner, 1-anilinobenzoxazole dyes have been synthesized. The oxazoles are produced by condensing arylamines with 1-mercaptobenzoxazole, which is prepared from orthonitrophenol. The dyes obtained are similar in hue and properties to the corresponding benzothiazoles.

Friedal-Crafts Reaction Mechanism

P. H. Groggins and R. H. Nagel

An attempt is being made to clarify the mechanism of the Friedel and Crafts synthesis of ketones and keto acids by studying the effect caused by the introduction into the reaction mass of compounds which will liberate or combine with chlorine. The data thus far available indicate that acid chlorides and acid anhydrides behave differently in the presence of such agents.

Cyanin Dyes Synthesis

H. van B. Joy and Marston T. Bogert

2-Methylperinaphthothiazine was alkylated with methyl and with ethyl iodide. From the methiodide, a carbocyanin was prepared by the action of ethyl orthoformate in pyridin solution. The ethiodide yielded the analogous carbocyanin when treated with ethyl orthoformate and potassium acetate in acetic anhydride solution. Condensed with p-dimethylaminobenzaldehyde in absolute alcohol solution, these alkyl iodides gave the p-dimethylaminostyryl derivatives. From the alkyl iodides in alcoholic solution digested with silver chloride, the corresponding alkyl chlorides were produced, and these latter yielded cyanins when heated with amyl nitrite in acetic anhydride solution. The absorption spectra and sensitization properties of these new dyes are now being studied, and it is hoped later to have some experiments conducted as to their selective bactericidal properties. Structural formulas for the new compounds were presented.

Acenaphthene Compound Dyes

Richard B. Conklin and Marston T. Bogert

From several acenaphtheneperimezathiozins, structural formulas for which were given, after condensation and reduction, dyes of the chloramine yellow type (Colour Index No. 814) were prepared by the customary reactions. The dyeings on unmordanted unbleached cotton were not very different from those produced by the analogous naphthalenepermimetathiazin dyes. In fastness to light and to bleeding, they compared favorable with chloramine yellow, but were less fast to laundering.

Spectrophotometry of Fading

W. D. Appel and W. C. Smith

The fading of dyed materials in light, unlike the fading in laundering, for example, is not to be regarded as a reversal of the dyeing process. The dyes are converted to other compounds which are likely to be colored. These compounds may, in turn, be transformed into still other colored or colorless substances. The observed fading may be the net result of a series of interdependent photochemical reactions. Radiation from spectral regions other than those absorbed by the original dyed material may play an important part. The changes in color or rather spectral absorption of the dyeing as fading progresses must, therefore, be taken into consideration in any critical study of fading.

Spectrophotometric reflection measurements of dyeing during light exposures provide a quantitative analysis of the changes taking place. Absorption bands characteristic of the original dyestuff decrease as fading proceeds and new bands characteristic of the materials formed may appear. Illustrative measurements showing the changes in absorption in the visible spectrum accompanying the fading of some well-known dyes on textiles are presented and discussed.

Electrical Phases of Wool Dyeing

Milton Harris

The colored ions of acid dyes are negatively charged, and those of basic dyes positively charged in the dye bath. Wool being amphoteric may be positive, negative, or neutral, depending upon the pH of the bath. It is of interest to consider the dyeing reaction from the viewpoint of these charges. The results of some quantitative experiments are given and discussed.

The charges on the wool in solutions of different pH values were determined by electrophoresis measurements. The relative charges on the dyes were determined with the MacInnes transference apparatus by the moving boundary method. Samples of purified wool were dyed in a series of dye baths of known pH, the progress of the dyeing being followed by spectrophotometric transmission measurements of the dye baths at intervals of time. The following dye were studied:—Potassium salts of indigotin di, tri, and tetrasulphonic acids, chrysophenin, diamine fast red F, crystal violet, and malachite green.

Retenethioindigo Synthesis

T. Hassalstrom and Marston T. Bogert

Betaretenesulphonic acid was converted into its sulphochloride, which was reduced with zinc and sulphuric acid to the mercaptan. This condensed readily with monochloracetic acid to betaretenethioglycollic acid. The action of chlorosulphonic acid on the latter produced betaretenethioindoxyl and betaretenethioindigosulphonic acid. By oxidation of betaretenethioindoxyl in alkaline solution, betaretenethioindigo was formed. This latter dyes cotton an olive green.

Retene ketone, originally discovered by Bamberger and Hooker, was also investigated. Contrary to the experience of these previous workers, we obtained the retene ketoxime without difficulty and succeeded in converting it, by a Beckmann rearrangement, into the phenanthridone. Retene ketone is easily nitrated; whereas retene does not yield a crystalline nitro derivative. Mononitroretene ketone is a yellow crystalline compound. Monoamineretene ketone is dark red and crystalline.

Gas and Fuel

Soda in Oil Pyrolysis

W. J. Huff and M. A. Elliott

Bunker "C" oil was cracked in the presence of steam at the temperature intervals between 1300 deg. and 1600 deg. F. The oil and steam rates were 0.22 cc. and 0.15 gram per minute, respectively. Comparative experiments were made with a refractory surface of magnesite blocks alone and when impregnated with 5 percent of sodium carbonate by weight. The impregnation of the refractory greatly accelerated the steam-carbon reactions above 1300 def. F. Accordingly, more carbon appeared in the form of blue gas and less was present on the refractory surface. The thermal yield was increased by as much as 45 percent in some cases. Soda did not exert any appreciable influence on the pyrolysis of the oil.

The gas resulting from a catalyzed experiment at 1600 deg. F. was practically hydrogen sulphide-free. The possible poisoning effect of sulphide was therefore investigated by impregnating the refractory with sodium sulphide. This addition was effective in catalyzing the steam-carbon reactions but caused the oil gas yield to decrease. Further experiments are in progress to verify this observation.

Sulphur Dioxide in Gas Mixtures

M. C. K. Jones and W. E. Russell

Gaseous compounds of sulphur require careful consideration in the commercial production and utilization of gas mixtures. Hydrogen sulphide is the most important such sulphur compound in fuel gases, while sulphur dioxide is the consequent product of its combustion. Under certain circumstances, however, the simultaneous existence of sulphur dioxide and hydrogen sulphide may come about, requiring consideration of possible resultant effects, particularly as to their interaction according to the reaction:—

$$SO_2 + 2H_2S = 2H_2O + 3S.$$

This paper briefly considers this reaction of sulphur dioxide and hydrogen sulphide and outlines a method for their respective determination. The method consists of the fixation of the gases in sodium carbonate solution, their ultimate separation, and subsequent titration by iodine.

Coal Analysis in Carbonization

E. B. Kester, E. J. Schneider, and F. W. Jung

Twenty representative bituminous coals have been studied with respect to their alphas, beta, and gamma content and benzene-extractable matter. The latter has been further resolved into oily and solid bitumens. The coals have also been analyzed for their content in ulmins, total bitumens, and resistant plant residues. Resamples have been analyzed to bring out the duplicability of such analyses and to show the effect of aging. An attempt has been made to correlate these data with other properties of the coal such as ultimate and proximate analysis, quality of coke obtainable and yields of by-products. Little correlation has been demonstrated. Such relationships as are indicated are slight and exceptions are common. The conclusion is reached that other factors such as quality and kind are quite as important in determining the behavior of coal as actual percentages of the normal constituents.

Wyoming Coal as Fertilizer Blast Furnace Fuel

P. H. Royster and T. B. Hignett

Proposed processes for smelting potash and phosphate rocks in the blast furnace to produce fertilizer materials are under investigation at the Bureau of Chemistry and Soils. No coke is available near the large deposits of potash rocks in Wyoming, but there is locally available an abundance of a noncoking sub-bituminous coal. This coal has been used in experimental blast-furnace tests and has been found to be a satisfactory fuel for the purpose. During the tests observations of the temperature, pressure, and gas composition at several points in the furnace were made and no indications of furnace difficulties were found. The mechanical strength of the coal at high temperatures is low. In a blast furnace of usual design, high back pressures would be encountered. This difficulty is absent in the furnace design as developed at the bureau. In the fertilizer blast-furnace process, the product appears as a fume of potassium chloride, or of elementary phosphorus, which is removed from the furnace gases by electrical precipitation. This fume is contaminated with the tar fumes from the coal distillation when coal is used as blast furnace fuel and presents a problem in handling the product.

Phenol Extraction from Caustic Solutions

E. B. Kester

Additional experiments to those reported in the first paper of this series have brought out the advantages of dilution for obtaining increased rapidity of extraction. Curves representing the results of the exhaustive extraction of phenols from 2.5-normal caustic soda show the same general relationships of the individuals among themselves with reference to their comparative extractabilities as were manifest at 5.0 normality. Increased throughout of solvent reduces the time of extraction to a given attenuation in proportion to the rate. That is, the amount of phenol extractable from a given quantity of caustic phenate is a function of the amount of solvent passed through it irrespective of the time. A rise in temperature of 35 deg. lowers slightly the rapidity of extraction. Water-immiscible alcohols extract sodium phenates rather than phenols from caustic solutions, a property which renders them unfit for phenol recovery. The applicability of solvent extraction of alkaline phenate solution to recovery of tar acids from tar distillates has been demonstrated. The curves indicate a rapid removal of the weakly acidic derivatives of phenol, followed by a slow removal of the more elementary compounds.

Sulphur Determination in Coal

E. L. Skau and I. L. Newell

A new modification of the benzidin sulphate method has been developed for the determination of sulphur in coals and cokes. Being a volumetric method, it is rapid and particularly suitable for routine determinations. It has the advantage that it can be used in conjunction with the usual calorific determination eliminating the time-consuming barium sulphate precipitation. Results have been determined on fifteen coals and cokes of widely varying compositions, and comparisons have been made with sulphur values determined by the recognized standard methods. Comparison shows that it may be used as a substitute for these methods with a great saving of time.

Glass

Glass Composition

George W. Morey

Most glassware, old or new, has essentially the same composition, containing Na_2O, CaO, and SiO_2 as its main ingredients, in about the same proportions. The reason is commercial glass must, first of all, be workable without divitrification. This implies that it attain a considerable viscosity before its freezing point is reached. In the phase equilibrium relations in the ternary system, Na_2O-CaO-SiO_2, it is shown that only in a narrow range of composition is the liquidus temperature sufficiently low to enable the liquid to attain the necessary degree of viscosity, and hence commercial glassware is essentially of this composition, modified by inclusion of small amounts of oxides. Their effect is discussed under the composition of the different types of commercial glass. Glass is to be regarded as a liquid, from the point of view of phase equilibrium, which considers only its stability with reference to a crystalline phase, and the physical properties of the material are not pertinent to this definition. The ordinary glass passes from the mobile condition prevailing during its manufacture, continuously increasing in viscosity, until it becomes apparently rigid; and at no stage is this change discontinuous, when time is given at each temperature for a constant condition to be reached. The attaining of a constant condition is probably characterized by a continuously increasing molecular complexity, but there is no indication of the presence of definite compounds. It seems to be a mutual solution of the various components, of unknown statistical distribution of the different atomic grouping.

Glass Analysis

G. E. F. Lundell

Improvements have been made, to keep pace with the need for greater speed and accuracy, in methods for the decomposition of glass by fusion or by wet attack. There has been an increasing use of perchloric acid, not only in the determination of silica, but also for the decomposition of samples that are to be used in other determinations. The reagent 8-hydroxyquinolin has shortened the time required to determine magnesia, and has opened up the possibility of more rapid determinations of the alkalies. Determinations of sodium have been greatly simplified by the use of recent improvements in the triple acetate method. Methods for the determination of extremely small amounts of constituents, such as cobalt, have been developed, and work is being done along the lines of how some constituents occur, and the changes that may take place, as for example through exposure to light.

The need for greater accuracy in analytical determinations has been met by improved technic, as in the determination of iron by the potentiometric method, and by the preparation and distribution of standard analyzed samples of ceramic materials. Future demands will probably lead to the complete abandoning of "continuing" methods of analysis in which most of the determinations are made by one analyst working on a single sample, in favor of "unit" methods in which the determinations are made by different analysts working on separate samples.

Industrial and Engineering

Sulphur Dioxide Recovery

Raymond L. Copson and John W. Payne

In agreement with the results of Johnstone, it was found possible to recover sulphur dioxide from waste gases as dilute sulphuric acid. Mixtures of sulphur dioxide and air were bubbled through water containing manganese sulphate as catalyst. Thirty-percent acid was readily produced, but the reaction ceased at about 40-percent acid. In a glass column with a "fine" porous plate at the bottom through which the gas was introduced, rates of absorption several times greater than those reported by Johnstone were obtained. The concentration of catalyst, temperature, gas composition, rate of gas flow, and depth of absorbing solution were studied as affecting the rate of absorption. An interpretation of the results is given. The capacity of the apparatus was compared for batch as against continuous operation.

Other experiments showed that the rate of absorption per unit volume was greater with a "fine" porous plate than with a "coarse" plate. The rates of absorption per unit volume in both a small and a large packed tower were found to be very much smaller than those in the glass column with porous plate bottom. The catalyst was found to be susceptible to "poisoning" by minute amounts of certain substances. In this connection, water from several sources, refinery gases containing sulphur dioxide, and various materials of construction were tested.

Thiophene from Benzene

Harry N. Holmes and Norvil Beeman

Although the use of anhydrous aluminum chloride for the removal of thiophene from benzene was suggested as early as 1895, industry has failed to adopt this method, preferring the wasteful sulphuric acid treatment. Investigators had assumed that such inadequate removal of thiophene as they secured with aluminum chloride was due wholly to chemical reaction. Consequently they carried out the treatment at higher temperatures, usually at the boiling point of benzene. Holmes and Beeman carry out the treatment at temperatures preferably ranging from 25 deg. C. to 35 deg. C. and use their aluminum chloride in a special fractional manner with effective agitation. They believe that part of the benefit is obtained by adsorption of an aluminum chloride-thiophene compound on the rest of the aluminum chloride. The effect of traces of water is discussed. Also the relative merits of thiophene tests are presented.

With relatively very small amounts of anhydrous aluminum chloride the authors readily remove all the thiophene from commercial benzene. The process is very simple and very inexpensive for the loss of benzene on a commercial scale would probably be less than one percent.

Paint and Varnish

Solid-Liquid Air-Contact Angles

F. E. Bartell and Allan D. Wooley

The purpose of this investigation was to study the characteristics of static advancing and receding contact angles and to determine if possible their relation to the "equilibrium" contact angle. The solid surfaces used were of silica and pyrex; the liquids, halogenated organic liquids. Different methods of pretreatment of surface were studied. The results obtained indicate that both the advancing and receding contact angles may exist as stable and characteristic angles for the precise system in question. It was found that by appropriate methods of pretreatment of surfaces both the advancing and receding contact angles were of the same value. The conclusion was reached that an advancing contact angle furnishes a very sensitive criterion of the surface condition of the solid.

X-Ray Research on Paints

G. L. Clarke

Recent improvements in x-ray apparatus and technic, which are of special value in the study of paint and varnish materials, are illustrated. These include x-ray tubes with which very rapid exposures can be made to follow oxidation and polymerization processes. Long wavelength x-ray tube for the study of colloidal properties, for example, the use of magnesium target x-ray tubes producing a characteristic wave-length of 9.86 A.U. in comparison with the usual technic with copper radiation at 1.54 A.U. The tangent drop diffraction method and new methods of studying thin films.

The most recent results on the structural anaylsis of films of drying oils are presented. Crystal formation in liquid and colloidal gel material by means of electric discharges, both spark and corona, are presented for the first time. This involves change of dialectric as well as quantitative analysis of wax and crystal formation in varnishes. Structural studies of some new synthetic resins and sulphur dioxide complexes are reported. Progress in the measurement of particle size and especially particle shape in pigments from x-ray diffraction data are outlined. Curious changes in state of aggregation of certain interesting colors and dyes as a function of concentration are presented. The possibilities of research in this field are illustrated by Nile blue sulphate.

Rheological Determinations

Eugene C. Bingham

So long as it was impossible to predict the associations of liquids, it was impossible to predict their physical properties, including fluidity, by means of atomic constants. With the knowledge that associations may be predicted, it becomes possible to calculate the fluidities of a material at various temperatures. This possibility makes it possible to follow changes which take place within a material due to chemical reaction. One can readily distinguish between polymerization, condensation, and association.

Printing Ink Manufacture

L. Englehart

This is a description of the method of printing ink manufacture, the raw materials used, and the characteristics of the finished products that are varied in accordance with the nature of the material being printed upon and the type of printing process used.

White Paint Hiding Power

E. O. Kraemer and O. E. Schupp, jr.

A simple reflectometer involving a photronic cell has been constructed, with which the relative brightness of paint films can be measured to better than 0.1 percent. By means of this instrument, brightness or contrast ratio versus film thickness curves can be determined and absolute hiding powers can be calculated in accordance with conventional definitions of complete hiding. An experimental investigation of the contrast sensibility of the eye showed that the average minimum detectable contrast varies appreciably with the type of pattern used, but for all the patterns customarily used as backgrounds for paint-outs, the average minimum detectable contrast is distinctly less than 1 percent. It is concluded that the A.S.T.M. definition for complete hiding, which is based upon a value of 2 percent, should be modified accordingly.

Wet and Dry Film Hiding Power

R. H. Sawyer

Comparisons of wet and dry film hiding power tests have been made. A new dry film test is proposed. Hiding powers as obtained at visual complete hiding differ very considerably from similar values at 2 percent contrast. The shapes of curves relating to pigment hiding power and concentration of pigment in the paint are significantly different for wet and dry films.

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Naval Stores

Narrow Changes in Southern and Local Turpentine And Rosin Prices--Receipts Moderate and Primary Stocks Show Further Decreases -- Offerings Light

The local market for naval stores was a rather quiet affair last week. There was nothing very stimulating in Southern market advices and purchasing here was generally confined to comparatively small quantities, as is usually the case at this period of the year. Changes in turpentine and rosin quotations from day to day were confined within small limits as a rule, in company with the action of primary markets.

Southern markets remained closed on Good Friday. Transactions in turpentine on other days of the week were rather light or moderate. Offerings were generally small, however, and at one time the price at Savannah was one cent a gallon above the closing quotation of the previous week.

There was a further decrease in stocks of turpentine at Savannah, clearances being comparatively liberal, with shipments on one day of the week of nearly 4,000 barrels. Stocks in London continued to diminish, supplies there late last week amounting to only about 7,600 barrels, as compared with 20,500 a year ago.

Arrivals of turpentine in the three principal seaboard markets in the South during the naval stores year ended with March were more than 100,000 barrels smaller than in the previous year and about 160,000 less than in the year before that. Stocks in those markets at the close of last year were about 10,000 barrels smaller than at the end of the previous year, but supplies in the interior of the South, according to some reports, showed a considerably greater decrease as compared with the previous season.

Receipts of turpentine and rosin in seaboard markets in the South thus far in the current season have not been up to the expectations of some, but it is considered too early as yet to get anything like a clear idea as to the probable production during the new season, although there still appears to be a belief among not a few here and in the South that some increase over the output of the previous season is likely to be witnessed.

Offerings of all grades of rosin in Southern markets were light last week, and the prevailing tone was firm, although transactions were comparatively small. Receipts were moderate, while the outward movement from both Savannah and Jacksonville was again comparatively liberal, and there was a further shrinkage in stocks in those centers.

Price Changes

Prices were changed during the past week as follows:—

Advanced

Turpentine, gum, 1¼c. per gallon.
Rosin, gum, 5 to 10c. per unit.

Reduced

None

Comparative Values

Index numbers compiled from five representative items of the naval stores group on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
80.1	76.5	78.1	94.8

Market news that may have developed after this report was sent to press will be found on page 2.

Turpentine

A firm tone prevailed much of the time last week in the local market for turpentine, this being a reflection of similar conditions in the South, where the trend of prices was upward in the main. Sales in the South as officially reported were rather light, but there was sufficient buying interest to take care of the moderate offerings. The stock at Savannah showed a further decrease as the outward movement exceeded the arrivals.

Savannah Turpentine

SAVANNAH, April 14, 1933.

Changes in turpentine quotations were narrow, with the tone of the market firm. Following is a record of the market for the week:—

	Cents per gal.	Barrels Sales.	Receipts.	Shipments.	Stocks.
Saturday	36½	63	219	236	8,515
Monday	36¾	173	239	...	8,754
Tuesday	37	62	558	3,916	5,396
Wednesday	37½	100	207	56	5,547
Thursday	37¾	100	473	98	5,922
*Friday	..	...	...	...	....

* Holiday.

Jacksonville Turpentine

JACKSONVILLE, April 13, 1933.

Turpentine offerings were light and the market retained a firm tone. Following is a record of the market for the week:—

	Cents per gal.	Barrels Sales.	Receipts.	Shipments.	Stocks.
Friday	36¾	...	188	202	35,243
Saturday	36½	169	348	105	35,486
Monday	36½	230	351	250	35,587
Tuesday	37	...	278	110	35,755
Wednesday	37½	118	222	100	35,877
Thursday	36¾	353	331	7	36,201

Pensacola Turpentine

PENSACOLA, April 8, 1933.

The turpentine market was quiet and steady. Following is a record of the market for the week:—

	Barrels Receipts.	Shipments.	Stocks.
Monday	89	...	19,017
Tuesday	72	...	19,089
Wednesday	69	125	19,033
Thursday	54	123	18,944
Friday	43	...	18,987
Saturday	52	...	19,039

Chicago Turpentine

CHICAGO, April 14, 1933.

Turpentine appears to be occupying a fairly firm market position here at this time, with buyers willing to take a little more active part and to place orders on a slightly more active basis. Total business being done is still restricted, but the tone is described as being somewhat better. Material is fairly closely held. Ruling prices at the close of business last night were:—Five-drum lots, 46c. per gallon; five wood barrels, 51c.; single drums, 49c.; single barrels, 54c.

London Turpentine Prices

Quotations on turpentine in London last week were:—

	Per cwt. In bbls. s.	d.
Saturday	60	9
Monday	61	0
Tuesday	61	6
Wednesday	62	0
Thursday	62	0
*Friday	..	..

* Holiday.

London Turpentine Stocks

Stocks of American turpentine in London were:—

	April 14.	Previous week.	Last year.
Barrels	7,621	8,853	20,471

Rosin

Business in rosin was rather quiet last week so far as the local market was concerned, consumers still being disinclined to purchase ahead to any extent. Domestic trade in the South was also comparatively quiet and there was apparently no improvement in the inquiry from abroad, where the markets were closed at the week end for the Easter holidays. The tone of Southern markets, however, was generally firm. Receipts were moderate and there was no pressure of offerings. A further decrease was reported in primary stocks.

Savannah Rosin

SAVANNAH, April 14, 1933.

Rosin quotations moved within a narrow range. The market was rather quiet. Following is a record of the market for the week:—

	Price per unit—Low of range quoted— Sat.	Mon.	Tues.	Wed.	Thurs.	*Fri.
B	$1.85	$1.85	$1.90	$1.90	$1.90	...
D	1.95	1.95	2.00	2.00	1.95	...
E	2.40	2.40	2.45	2.45	2.45	...
F	2.55	2.55	2.62½	2.62½	2.60	...
G	2.60	2.60	2.62½	2.62½	2.60	...
H	2.60	2.60	2.62½	2.62½	2.62½	...
I	2.60	2.60	2.65	2.65	2.65	...
K	2.95	2.95	3.00	3.00	3.00	...
M	3.00	3.00	3.00	3.00	3.05	...
N	3.30	3.30	3.30	3.30	3.35	...
W. G.	3.40	3.40	3.40	3.40	3.40	...
W. W.	3.50	3.50	3.55	3.55	3.55	...
X	3.55	3.55	3.55	3.55	3.55	...
	Barrels					
Sales	1,082	...	1,671	...	1,324	...
Receipts	911	773	2,097	938	1,280	...
Shipments	445	...	7,800	885	165	...
Stocks—	107,343	108,116	102,413	102,466	103,581	...

* Holiday.

Chicago Rosin

CHICAGO, April 14, 1933.

Sentiment in this product at the moment has turned toward more optimistic channels, with the result that there is a harder tone and holders are not quite so willing

(Continued on page 42)

Current prices on naval stores are given in the alphabetical list of prices beginning on page 5

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Durez Oil Soluble Resins

Flaxseed, Linseed Oil, Cake, and Meal

Domestic Flaxseed Prices Rise with Outside Markets--Buenos Aires Remain Firm--Steady Demand for Cash Seed--Receipts Moderate--Linseed Oil Advanced

The trend of flaxseed prices was upward much of the time in domestic markets last week, the advance being attributed largely to strengthening developments in outside markets, with the latter influenced by inflationary talk. Trading in flaxseed futures was rather quiet, but sentiment appeared to be more bullish than recently, owing to the action of other speculative commodities. The Buenos Aires market presented a firm appearance during the period, though prices did not show much change.

There was a steady inquiry for cash seed in domestic centers, demand being sufficient to absorb the light offerings. Most of the purchasing was reported to be for account of elevator concerns, crushers still being inclined to hold aloof. Receipts at terminal points were moderate and the country movement was light. Unfavorable crop accounts were received from the Northwest, where farm work has been retarded recently by backward Spring weather.

Linseed oil was higher, with a better inquiry reported. Cake and meal were quiet and easier.

Market news that may have developed after this report was sent to press will be found on page 2.

Flaxseed Receipts at New York

Receipts of flaxseed at New York were as follows:—

	Bushels	
	Domestic.	Foreign.
April 13	.....	200,160
Total	.....	200,160
Since January 1—		
This year	.....	1,293,255
Last year	.....	1,936,657

Flaxseed

DULUTH, Apr. 14, 1933.

Growing strength in the deferred futures was evident in the Duluth market during the last week as holdings were transferred from the May into the July positions. The open interest in May shows a steady shrinkage, while July increases. Although speculative interest is not large, increasing strength in grains and talk of inflation gives backbone to the market and there are some who think prices will continue to harden with prospects of business improvement. The approach of the seeding season in the Northwest is drawing attention to soil conditions and to the prospective acreage for the 1933 crop. Cash business is quiet owing to scarcity of incoming supplies.

The week's closing price range was as follows:—

	Cash.	May.	July.
Saturday	$1.16	$1.15	$1.15
Monday	1.17½	1.16½	1.16¼
Tuesday	1.18	1.17	1.17½
Wednesday	1.17	1.16	1.16½
Thursday	1.20¼	1.19¼	1.19
*Friday	...	...	...

Daily receipts and shipments of domestic seed during the past week, and in the corresponding week last year, were, in bushels:—

	Receipts		Shipments	
	1933.	1932.	1933.	1932.
Saturday	....	4,865	....	....
Monday	3,158	5,764	....	....
Tuesday	....	2,067	....	....
Wednesday	2,742	3,695	....	....
Thursday	812	4,977	....	....
Friday	*...	2,052	....	....
Totals	6,712	23,420	....	....
Prev. week	11,160	20,728	....	....
From Aug. 1	3,862,007	3,235,776	3,431,915	3,205,660
In public warehouses	448,423	229,611	....	....

* Holiday.

Minneapolis Flaxseed

MINNEAPOLIS, Apr. 14, 1933.

Undertone of the cash flax market is still firm and there is a steady demand for the offerings but a crushing company is taking most of the arrivals now where elevator buyers absorbed them in previous weeks. Receipts are moderate and are not expected to show much volume for sometime to come. Spring has been very backward through the northwest and farmers are busy in their fields, so busy that they are not apt to take much time out to deliver grain to country elevators.

At the moment the country movement is general but very thin. Today's receipts included cars from North and South Dakota and Minnesota. None arrived from Montana. Most of the flax is moving through diversion points but apparently Duluth buyers are not interested in the offerings.

Local public elevator stocks of seed increased 10,000 bushels in three days. Shipments during the past few days totaled heavier than receipts, suggesting the shift of additional supplies from private to public bins so as to be in a deliverable position when May contracts mature. However, shipments have been made from private bin stocks of late. Shipping advices are very light from day to day and line elevator managers report very small farm deliveries.

Seeding operations may be delayed this spring because of the slow planting of other grains. In the past week or so considerable moisture fell and improved soil conditions, which are good except in parts of South Dakota. There is apt to be a shortage of seed here and there but government loans for seed purposes are much more prompt this year and much depends on the inclination of the farmers as regards production. Prices are none too high and wheat values are gaining rapidly enough to shift interest to that grain. In all, the outlook for an important flax acreage is none too good currently.

Trade in futures has been slack ever since the market dropped so easily from the post-bank holiday bulge. Speculators lost interest then and have not been active since.

Spot No. 1 seed is quoted at 1c. to 1½c. over May mostly. Cash interests will pay up to 2c. over for fancy quality. No seed flax trade is noted, though there is scattered inquiry coming to seed houses. Not enough interest is being displayed by the country to encourage the seed houses to compete for the track offerings of desirable quality as yet.

The week's closing price range was as follows:—

	Cash.	May.	July.
Saturday	$1.16	$1.14	$1.15
Monday	1.17½	1.15½	1.16
Tuesday	1.18¼	1.16½	1.17½
Wednesday	1.17¼	1.15¼	1.16¼
Thursday	1.19¼	1.17¼	1.18¼
*Friday	...	...	...

Daily receipts and shipments of domestic flaxseed during the week ended April 14, and in the corresponding week last year, were, in bushels:—

	Receipts		Shipments	
	1933.	1932.	1933.	1932.
Saturday	3,360	....	6,440	3,200
Monday	9,090	1,110	11,200	....
Tuesday	3,030	1,110	6,400	....
Wednesday	4,040	2,220	8,000	....
Thursday	3,030	1,110	6,400	....
Friday	*...	3,330	....	....
Totals	22,550	8,880	38,440	3,200
Prev. tot.	2,839,120	3,277,390	1,417,100	847,330
From Sept. 1	2,861,670	3,286,270	1,455,540	850,530
Pub. stocks	540,000	361,755	....	....

* Holiday.

Chicago Flaxseed Movement

The movement of flaxseed last week was as follows:—

	Bushels	
	Receipts.	Shipments.
Saturday	.....	.....
Monday	.....	.....
Tuesday	2,000	.....
Wednesday	3,000	.....
Thursday	.....	.....
*Friday	.....	.....
Totals	5,000	.....
Since Jan. 1—		
This year	295,000	11,000
Last year	136,000	.....

* Holiday.

Winnipeg Flaxseed

WINNIPEG, Apr. 14, 1933.

Trading in flaxseed futures was quiet with an upward trend in prices. The week's closing range was as follows:—

	Cash.	May.	July.
Saturday	$0.80¼	$0.81	$0.82
Monday	.81	.81⅝	.82⅛
Tuesday	.82⅝	.83¼	.84⅛
Wednesday	.82	.82⅝	.83⅜
Thursday	.83⅜	.84⅛	.85⅛
*Friday	...	...	...

* Holiday.

Canadian Flaxseed Statistics

Canadian flaxseed statistics for the week ended April 14, and for the season from August 1:—

Stocks in Store

	Bushels.
Fort William and Port Arthur	658,226
Churchill	.....
Interior elevators	92
Vancouver	146
Total	658,464

Receipts During Week

Fort William and Port Arthur	39,584
Churchill	.....
Interior elevators	.....
Vancouver	25
Total	39,609

Shipments During Week

Fort William and Port Arthur	.....
Interior elevators	.....
Churchill	.....
Vancouver	.....
Total	.....
Movement at Fort William and Port Arthur since August 1, 1932:—	
Receipts	663,258
Shipments	1,037,700

Current prices on linseed oil, cake, and meal are given in the alphabetical list of prices beginning on page 5

Buenos Aires Flaxseed

The flaxseed market ruled firm. Opening prices per bushel on May contracts were:—

	Last week.	Last year.
Saturday	$0.58¾	$0.61⅝
Monday	.58⅞	.62⅛
Tuesday	.58⅞	.62¼
Wednesday	.58⅞	.63⅜
Thursday	* ..	.62½
Friday	* ..	.62⅝

* Holiday.

Exports

	Bushels		
To—	Last week.	Previous week.	Last year.
United States	.....	272,000	169,000
United Kingdom	12,000	4,000	.....
Continent	220,000	543,000	311,000
Orders	185,000	469,000	673,000
Others	.....	28,000	31,000
Totals	417,000	1,316,000	1,184,000

Since January 1

	Bushels	
To—	This year.	Last year.
United States	1,902,000	3,985,000
United Kingdom	686,000	919,000
Continent	8,316,000	6,960,000
Orders	12,308,000	16,821,000
Others	424,000	398,000
Totals	23,636,000	29,083,000

Visible Supply

	Bushels.
Last week	6,299,000
Previous week	6,693,000
Last year	7,874,000

Indian Flaxseed Exports

	Bushels		
To—	Last week.	Previous week.	Last year.
United Kingdom	100,000	8,000	4,000
Continent	104,000	44,000	76,000
Others	40,000	.....	48,000
Totals	244,000	52,000	128,000

	Bushels	
Since April 1—	This year.	Last year.
United Kingdom	108,000	4,000
Continent	148,000	116,000
Others	40,000	56,000
Totals	296,000	176,000

Hull Flaxseed Prices

Quotations on flaxseed in Hull last week were:—

	Per ton	
	La Plata.	Calcutta.
Saturday	£8¼	£9¼
Monday	8¼	9¼
Tuesday	8¼	9⅜
Wednesday	8¼	9⅜
Thursday	8¼	9⅜
*Friday	..	..

* Holiday.

Linseed Cake and Meal

The market was easier, strength of seed being offset by the lack of any improvement in demand. There were offerings on spot at concessions of 50c. per ton on both cake and meal. A fair inquiry was noted for meal, but purchasing was confined to comparatively small quantities. The export inquiry for cake was slow.

Minneapolis Linseed Meal

MINNEAPOLIS, Apr. 14, 1933.

Demand for meal is good compared with offerings made and tone of the market is strong. Output continues very limited and at the moment it is not planned to increase it. Distributors are taking more full carloads and are giving their shipping instructions promptly, all of which tends to reduce the stock on hand rapidly and create a strong situation. Demand for mixed car lots still is good at firm prices.

There is no particular interest displayed in deferred shipment offerings. Crushers do not anticipate any oversupply at any time during the season and it is unlikely that there will be any accumulation made late this spring or early next fall.

Quotations on carload lots f.o.b. Minneapolis, up to 30 percent protein $17.00 to $17.50, up to 37 percent protein $20.00 to $20.50, mixed $22.00 to $22.50.

Daily shipments of linseed oil meal and cake during the week ended April 14, and in the corresponding week last year, were, in pounds:—

	1933.	1932.
Saturday	250,278	248,540
Monday	304,325	230,820
Tuesday	465,465	152,133
Wednesday	453,678	40,300
Thursday	465,140	128,000
Friday	*.....	360,965
Totals	1,938,886	1,160,758
Previous totals	68,210,365	86,922,462
Totals to date	70,149,251	88,083,220

* Holiday.

Chicago Linseed Meal

CHICAGO, Apr. 14, 1933.

Recent firming of the flax market, in common with other grains, has imparted a fair degree of strength to linseed meal and this product is now moderately higher than lately was the case. Buying is not very important, as yet, although reports are that some comparatively good purchases may be over-hanging the market. Sellers appear more encouraged than in some time, although admitting the market is still dull. Ruling quotations are:—Round lots, $22 per ton, nominal; car lots, $22 to $22.50; less than car lots, $24.50.

Linseed Oil

The market for linseed oil was firmer last week with a better inquiry reported from consumers and dealers, buying interest being stimulated to some extent by an upward trend in flaxseed prices in domestic markets,

(Continued on page 42)

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Gums, Shellac, Waxes

Camphor Demand Gains Slightly at Steady Prices--Spot Competition Keen in Carnauba Wax--New Price Scheme on Bleached Shellac--Karaya Moving Well

Lassitude held complete sway over the market for gums and waxes during the past week. Practically every merchant selling these articles reported a major lack of demand and indicated that the movement into consumption was along lines that were within jobbing limits and which indicated that buyers as a whole were not disposed to trade in quantities much larger than hand-to-mouth rations. Pricewise, the market was very steady, but from the standpoint of sales it was unsettled and highly unsatisfactory.

An important development came in the shellac market during the period under review. Manufacturers of bleached shellac adopted a schedule of prices based on quantities taken in one delivery rather than on the total amount of material contracted for. The price to be paid in the future will depend on the quantity of goods accepted in one delivery; if the contract called for ten barrels and the buyer took but four in one delivery, he would pay the price schedule on deliveries of one to four barrels. Quotations on orange gum were not affected by this arrangement. A change in shellac varnish differentials was also made.

Demand for camphor was slightly improved, but on the whole it was below normal, and in point of fact most sellers declared that based on business done in the recent past the market was dull. Prices held unchanged, reflecting the maintainence of firm values at the source of supply. The call for arabic was light. Prices held unchanged. Favorable reports concerning deliveries of new crop came from the primary market. An early arrival of the rainy season would be an adverse development that could offset to some extent the very fair sized deliveries to primary market shippers. Benzoin was in fair demand and prices were fully supported in all quarters.

Carnauba wax was in comparatively negligable demand throughout the period. Dealers here reported that the market was highly competitive and the prices at which the wax has been sold out of spot supplies were said to be absolutely unjustifiable by any primary market cost during the past six months. Beeswax had a fair sized movement, and the market ruled in steady fashion so far as bleaching waxes were concerned. Spermaceti was in moderate demand and prices showed stability.

Price Changes

Prices were changed during the past week as follows:—

Advanced

None.

Reduced

None.

Comparative Values

Index numbers compiled from fourteen typical gums and waxes on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
63	63	63.8	84.6

Market news that may have developed after this report was sent to press will be found on page 2.

Gums

Aloe. — Cape gum was somewhat steadier and offerings were made on the basis of 8½c. to 9c. per pound following some fairly substantial sales that had been made at 8¼c. Curacao gum was about steady but the movement showed no improvement over than in recent weeks.

Arabic.—The market was quiet with 6c. per pound being the minimum spot quotation for cleaned amber sorts. News from the primary market was mainly propitious for the gathering of an adequate supply. The outlook in that respect could be changed, however, by the arrival of the rainy season somewhat ahead of its usual date. As to demand on spot, it was far from being satisfactory and consisted mainly of small orders that were placed under highly competitive conditions.

Asafetida.—Routine request was the rule and the total of sales was unimposing. Prices appeared to be very steady because of the decrease in competition that had driven values very low in the past. Stocks were not overly large but they appeared to be sufficient.

Benzoin.—Three or four fairly good-sized inquiries for Sumatra gum were in the market last week, giving support to prices and creating a general improvement in undertone throughout the spot. Siam gum moved in somewhat dull fashion but the recent advance in prices was retained.

Camphor. — Although demand was somewhat improved during the past week, it was still very small and conditions did not suggest an early expansion in the business. Prices held without change. The stability here was related to the unchanging cost of the article in Japan. Manufacture of synthetic camphor in this country will likely have an influence on the future business in Japanese BB camphor, as well as European synthetic. Prices have not been made available as yet.

Galbanum.—Jobbing business was not very active and the market was nominal to a very considerable extent. Prices remained steady at unchanged levels.

Gamboge.—Business was on a hand-to-mouth basis throughout the period. Sellers were firm in their views. Buyers were inclined to place orders for no more gum than their actual requirements made necessary. The disposition was to hold aloof and to await further developments.

Ghatti.—Small lots sold freely and in fair-sized volume during the past week and prices were somewhat better supported than they had been. Undertones were generally steady and competition was reported to be negligible during the period reviewed.

Karaya.—Ice cream powder makers have been quietly covering their needs. However, their coverage for future requirements has been along conservative lines, as they are uncertain as to how good demand for their product may be during the active months that are ahead. Pricewise, the market was very steady.

Mastic.—Jobbing business—and little of that—alone was current on spot. Buyers in quantities were aloof, actual requirements being supplied out of their unusual stock reserves. Prices were the principal importer and were very steady at unchanged levels.

Tragacanth.—An uneventful week was reported. Prices were very steady, no further tendency toward declines being noted. Movement into consumption was well below normal quantities, but also was in a volume comparing well with that in recent weeks.

Shellac

A change in the scheme for quoting prices on bonedry and refined shellac was put into effect last week by bleachers of shellac. Buyers from now on will pay a price in accordance with the amount of shellac taken in one delivery. The schedule of prices is as follows:—One delivery, 10 barrels or more, 16c. per pound; 5 to 9 barrels, 17c.; 1 to 4 barrels, 18c.

This scheme works out as follows:—On a contract for fifty barrels, if the buyer took single barrel deliveries, he would pay 18c. per pound; if he took deliveries in five-barrel units, he would pay 17c.; if he took it in ten-barrel lots, or the whole fifty barrels at one time, he would pay 16c.

A change in differentials on shellac varnish was also put into effect. Orange varnish will cost 25c. per gallon less than white shellac varnish, as contrasted with the recent differential of 20c. Furthermore, while the price for 5-pound cut remains unchanged, the differential between 5-pound cut and 4½c. pound cut, and between 4½c. pound cut and 4-pound cut will be 5c. per gallon. Heretofore, 4½c. pound cut cost 2c. per gallon less than 5-pound cut, and 4-pound was 3c. per gallon less than 4½c. pound cut. The new schedule of prices follows:—Orange, 5-pound cut, 85c. to 90c. per gallon; 4½c. pound cut, 80c. to 85c.; 4-pound cut, 75c.; White, 5-pound cut, $1.05 per gallon; 4½c. pound cut, $1; 4-pound cut, 95c.

Prices for shellac in London and Calcutta were slightly lower last week when considered on sterling exchange at $4.88. However, on Thursday, European financial markets raided dollar exchange and sterling exchange advanced sharply. This rise in exchange would increase the net cost of shellac as a week ago sterling was around $3.41 as compared with $3.46 reached during the rise on Thursday.

Calcutta Shellac Prices

Calcutta quoted pure T. N., c. & f. New York, as follows:—

	Per pound—April 14.	Per pound—April 7.
April	9c.	9¼c.

The quotation in cents was subject to a discount in accordance with the rate of exchange prevailing on London.

Day-to-day prices and reports of market conditions were as follows:—

	Per pound.	Market.
April 7	9c.	Steady
April 8	9c.	Steady
April 10	9c.	Steady
April 11	9c.	Steady
April 12	9c.	Steady
*April 13	...	.....
*April 14	...	.....

* Market closed for Easter holidays.

London Shellac Prices

London quotations for shellac for later delivery have been as follows (the quotations in United States currency represent prices here and include other handling charges):—

	April 14. Shillings. cwt.	April 14. Cents. lb.	April 7. Shillings. cwt.	April 7. Cents. lb.
May	43	9.3	43½	9.4
August	45	9.6	45½	9.7

Quotations in cents per pound were subject to a discount in accordance with the rate of exchange prevailing on London.

Day-by-day closing prices were as follows:—

	Per hundredweight—May.	Per hundredweight—August.
April 7	43s. 6d.	45s. 6d.
April 8	42s. 6d.	44s. 6d.
April 10	42s. 6d.	44s.
April 11	42s. 6d.	44s. 6d.
April 12	43s.	45s.
April 13	43s.	45s.
*April 14	....	....

* Market closed for Easter holidays.

Waxes

Bees.—Movement to the bleachers was said to be fairly good, but not up to normal expectations. Replacement cost for African wax was reported little changed during the period. Demand locally was quiet and prices had some tendency to sag, though they were not changed during the period under review.

Candelilla.—Quotations were 9c. to 10c. per pound and confirmation through actual sales was difficult to obtain owing to the fact that manufacturing consumers did not show much interest during the period just ended. Supplies were not excessively large on the spot, but they seemed to be sufficient for more than current requirements.

Carnauba.—So far as local business was concerned, the reports of most dealers was that the market was flat, inert, and without sign of early recovery. There were some exceptions to this point of view, though where contrary opinions were expressed it was admitted that the total volume of sales was far under what it ought to be. The spot market was keenly and distressingly competitive. The prices at which some business has been taken have led some sellers to practically stand aloof until such time as carnauba wax may be sold at least the price paid for it by the importer. Certainly, no replacement cost over the past six months could be cited as a warrant for the prices alleged to have been quoted locally in a few instances. Not all dealers are scalping profits to this extent, but those that are have produced a highly disturbing situation for the majority of the trade. Cables from Brazil failed to show any weakness in prices; they were far out of line with the prices at which buyers are said to have placed orders last week. The opinion was advanced that some quarters did not believe that the Brazilian market would hold up, and with that view in mind they had taken a market view and were selling with a view to reducing stocks. Holdings of wax on spot were ample for much more than current requirements. Quotations were as follows, per pound:—

	Dealer—No. 1. Cents.	No. 2. Cents.	No. 3. Cents.	No. 4. Cents.	No. 5. Cents.
No. 1 yellow	20	21	20½	21	22½
No. 2 yellow	20	None	20	20	21½
No. 2 N. C.	14½	15	None	None	None
No. 3 N. C.	11¾	11½	11½	11¾	12½
No. 3 chalky	12	11½	11½	12	12¾

The Marx Hide & Tallow Company, Louisville, recently discovered that its original twenty-five-year charter had expired in 1932 and filed amended articles of incorporation, extending the life of the company for fifty years. Capital remains at $60,000. M. F. Marx is president; F. L. Marx, vice-president, and Sol W. Marx, secretary-treasurer. The company deals chiefly in hides and skins along with tallow, but handles some fertilizers, bone meals, etc.

Trade News Briefs

The United Drug Company has elected four new members of its board of directors. They are:—E. J. Griffing, vice-president in charge of sales, succeeding the late Dan M. Chambliss, Knoxville, Tenn.; W. E. Weiss, general manager of Sterling Products, Inc.; Henry Bristol, of the Bristol-Myers Company; and Smith Richardson, president of the Vick Chemical Company.

The Russian textile industry was poorly supplied with dyestuffs during 1932. Lack of common black dyes forced the largest mills to turn out gray cloth instead of black. Entire departments of the huge textile mill in Ivanovo-Voznesensk were obliged to stop operation several times. On the whole, the supply of dyestuffs for the textile industry did not exceed 65 or 70 percent of the demand in 1932.

George Moran, former chief chemist of the Pacific Print Works, Lawrence, Mass., has joined the sales technical service division of the Calco Chemical Company, replacing C. A. Funke, resigned. In his new capacity, Mr. Moran will direct the technical service in the printing and dyeing of the Calco fast colors, and has established his headquarters at the main plant of the company at Bound Brook, N. J.

The United Turkey Red Company, big British dyestuffs concern, of London, has reported a net profit amounting to £58,502 compared with £2,758 for the previous year, and the first preference reserve account is restored to £75,000 by the transfer of £23,295. No dividend was recommended on the ordinary stock, but the preference dividends were paid out of revenue, whereas last year reserves were drawn upon.

The Standard Oil Company of Indiana, which took over the Midwest Refining Company, has settled all disputes between T. A. Pedley, former treasurer of the Midwest; Henry G. Cline and Arthur Dewar, stockholders of the Midwest. Judge James C. Starkweather in the Denver district court consequently has dismissed all suits to prevent the liquidation. While the amounts paid were not made public, Pedley in his suit asked $28,000.

The Gasoline Products Company has filed suit against the Champlin Refining Company, alleging infringement of cracking patents and involving equipment understood to be of Winkler-Koch construction. The bill of complaint set forth alleged infringement of patents, including Rosenbaum No. 1,324,983; Black No. 1,456,419; Cross No. 1,734,079, and Howard and Loomis No. 1,869,337. The suit was filed in the United States District Court at Santa Fe, N. M., and was based upon cracking operations conducted by the Champlin Refining Company, a New Mexico corporation, at its refinery at Enid, Okla.

The Pennsylvania Grade Crude Oil Association called a meeting of New England jobbers and dealers, handling oil produced by association members, and it was held April 3 in the Hotel Statler, Boston, with seventy-five in attendance. E. J. Kenney, zone representative, Boston, presided and opened the talk with a declaration that there is a definite pick-up of business conditions in the region. He stated that on the strength of facts gathered during his recent tour of the region. S. A. Hartwell, Oil City, Pa., stated that the oils sold by association members are chemically of superior quality, and gave an explanation of this, also saying that it had been proven by tests in usage.

Aleppo and Persian
GUM TRAGACANTH
GUM MAMRA
GUM SHIRAZ
QUINCE SEED
Sold Only Through Jobbers
CHAACHOU PRODUCTS COMPANY
Direct Importers
11 E. 31st Street, New York City

SUN BLEACHED
BEEHIVE BRAND BEESWAX
Finest Quality Guaranteed Pure
WILL & BAUMER CANDLE CO., Inc.
SYRACUSE, N.Y. Established 1855
Spermaceti Ceresine Glycerine Stearic Acid Red Oil

Current prices on gums, waxes, and shellac are given in the alphabetical list of prices beginning on page 5

Monsanto Cresylic Acids Cresols and Derivatives

MONSANTO CHEMICAL WORKS, LTD., one of the leading producers of refined tar acid derivatives in the world, offers Cresylic Acid and Cresols at prices that make purchases extremely advantageous at this time. Their uniformity and quality recommend them to particular consumers whose products must be held to the highest standards possible.

The following is a partial list of products offered by Monsanto Chemical Works, Ltd. Shipments on a c. i. f. basis can be effected promptly and for moderate orders, stocks are carried in New York for f. o. b. New York delivery.

Pale Cresylic Acid, 97/99%
Dark Cresylic Acid 95%
Special High Boiling Cresylic Acid
Tar Acid Oil 25/30%
Pyridine, Pure
Meta Cresol, pure
Para Cresol, pure
Ortho Cresol, pure
Para Chlor Meta Cresol
Para Chlor Meta Xylenol

Your inquiries addressed to our nearest office will receive prompt attention.

Monsanto Chemical Works
ST. LOUIS. U.S.A.

Empire State Bldg. NEW YORK · Everett Station BOSTON · 500 N. Dearborn CHICAGO · 373 Brannan St. SAN FRANCISCO · Victoria Station House, Victoria St. LONDON, S. W. 1

Drugs and Fine Chemicals

Quinine Ethylcarbonate Reduced -- Soda Citrate Decline Due to Competition--Other Citrates Steady-- Rise in Sterling Silver Exchange Firms Imported Items

Sharp rise in sterling exchange, as well as the exchange of most of the European countries supplying drugs and fine chemicals to the United States, resulted late last week in a substantial increase in the cost to import foreign merchandise. Sellers of such items, however, were slow to advance their spot prices, having in mind the probability that the dollar will advance again when foreign financiers find that the basis for their raid—inflation of United States currency—has not taken place. However, most merchandise of foreign origin was somewhat firmer late in the week under review.

Demand for drugs and fine chemicals during the past week was moderately active. Some seasonable items came in for an improvement in call. Gains were moderate, however, and somewhat out of line with the improvement to be reasonably expected at this time of the year.

Return of beer backed by a national propaganda for its increased use as a beverage is being watched closely with a view to its effect on the consumption of beverages into which citric and tartaric acids go. Bottlers of soft drinks view the future with some concern as they fear a drop in the consumption of their products parallel with the possible increase in beer consumption. Needless to say, sellers of citric acid and tartaric acid are alive to the possibility that consumption of both by the soft drink trade may be less in coming summer.

Demand for codliver oil has been excellent, considering the lateness of the season. Distributors of the article have been forced to come into the first hand market for additional supplies and the total volume of sales has been more than satisfactory. However, prices for some brands of oil were priced more reasonably last week, but top quality brands remained very firm. Fishing has all but finished in Lofoten and a somewhat smaller fishing fleet has gone to Finmarken for the balance of the season.

Prices for soda citrate were reduced under the influence of keen competition in this market. Quotations for other citrates were not changed. Quicksilver was strong because of undersupply but the sales last week were confined to small quantities. Mercurials had an upward tendency but the expected rise had yet to materialize. Quinine ethylcarbonate was reduced, thus completing the revision downward of prices for all derivatives of cinchona bark.

Acid, Citric.—The failure of seasonable Spring weather to develop has had a deterrent effect on the sales of this acid for use in the bottled beverage and similar trades. Some gains have been noted of late, but they have not continued to expand. And added factor likely to affect total consumption this year is the countrywide expansion in sales of beer. The effect on this business on the sales of other bottled beverages will be watched closely by the citric acid producers as a sharp drop in the sale of such merchandise would reduce the acid requirements of the soft drink trade this summer.

Acid, Tartaric.—Little if any change in sales volume was reportetd. On the whole, the market lacks sales in the volume that would bring out more clearly the basic and fundamental strength as indicated by production costs at home and abroad. The leading producers indicate that the cost of production is such as to leave little margin for further decrease in sales prices to consumers. Notwithstanding the basic strength of the acid, competition was found to be quite keen.

Agar Agar.—Quotations for No. 1 and No. 3 have eased back again under the influence of a very limited demand for spot goods and a continuation of keen competition between leading interests. Quotations were 39c. to 41c. per pound for No. 1 and 24c. to 26c. for No. 3; No. 2 was at 36c. to 38c., no change in the inside figure being noted, but the range being slightly wider.

Alcohol.—The local market had a somewhat routine appearance. So far as new business was concerned, the situation was little changed from the moderate amount of orders reaching the market. The strength noted in the corn market had a tendency to change the situation as concerned the cost to produce alcohol from gain, prices for that raw material being somewhat higher. Reports from the middlewest were to the effect that distillation from grain would be increased somewhat in the nearby future. The situation in blackstrap molasses was without change. Stocks of alcohol unusued in the hands of jobbers were reported to be somewhat lower than had been expected. The several and sudden periods of very low temperatures served to reduce jobbers as well as distillers' stocks toward the end of Winter. Quotations for denatured alcohol to be delivered during the period April 1 to June 30, 1933, are as follows:—

	Cents per gallon.
*C. D. No. 5 drums, car lots	38.5
5 to 9 drums	44.5
1 to 4 drums	46.5
S. D. No. 1 tanks	30.4
drums, car lots	34.6
5 to 19 drums	40.6
20 drums	36.6
1 to 4 drums	42.6
barrels, car lots	37.6
5 to 19 barrels	43.6
1 to 4 barrels	45.6

* Credit of 1c. per gallon given on purchases of car lots or more.

Ammonia. — Though soda citrate was reduced rather sharply in price, ammonia was unchanged and, in fact, occupied a very steady position on the spot notwithstanding the absence of the more pressing type of consuming request.

Antipyrine. — Business was routine so far as quantities being taken into consuming channels were concerned. However, in the absence of any competition, prices remained firm and well stabilized at levels prevailing for many months. Consumption was said to compare fairly well with that of a year ago at this time.

Bismuth Metal and Salts. — Producers of metal indicated that the movement to consumers was in a volume comparing well with that in recent weeks. The price position of the article appeared to be very steady at 85c. per pound. Further unsettlement in salts has faled to develop. At one time, it was felt that downward revisions would come in salts other than subnitrate but no change in quotations has been made. As to demand, it was fairly good and in keeping with the volume of request current for some time past.

Bismuth-Ammonia Citrate. — Prices still held unchanged, although some unsettlement in another citrate brought a reduction in price last week. The call for bismuth-ammonia citrate remained about steady for quantities not much in excess of routine, jobbing size.

Cadmium Metal and Salts. — Producers emphasized the stability that has prevailed in prices for many months. Some gains in automotive production was expected to bring about an increased demand for cadmium to be used in the plating industry. Moderate improvement has already been noted. The market had a firm undertone and competition was negligible.

Caffeine, Citrated. — Prices were steady at $1.55 to $1.60 per pound. This contrasted with a sharp decline in soda citrate during the past week. Demand was fairly good and was in strict keeping with the volume ordinarily to be expected at this time.

Castor Oil. — Conservatism governed the demand of consumers of this article for technical and other purposes. Sales have not gained as some had hoped, or even expected they would. Prices were about steady but the market was subject to considerable competition.

CHICAGO, Apr. 13.—Castor oil is reported to be moderately firm in this market, with prices unchanged. Some small soap manufacturers and some drug houses have bought limited amounts of

Price Changes

Prices were changed during the past week as follows:—

Advanced

Silver bullion, N. Y., 1¼c. per lb.
London, ¾ pence per oz.
nitrate, ½c. per oz.

Reduced

Codliver oil, $1.50 per bbl.
Quinine ethylcarbonate, 10c. per oz.
Soda citrate, U.S.P. VIII, 1½c. per lb.
U.S.P. X, 2c. per lb.

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
173.3	173.3	173.4	174.2

Market news that may have developed after this report was sent to press will be found on page 2.

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 5

LACTIC ACID

50% - 80% - 85%

U. S. P.
Edible
Technical

CALCIUM LACTATE
STRONTIUM LACTATE

For immediate delivery from New York stocks

R. W. GREEFF & CO., Inc.
10 East 40th Street
New York

fine HEYDEN chemicals

Formaldehyde Para Formaldehyde
Hexamethylenetetramine
Sodium Benzoate Benzoic Acid
Benzaldehyde Benzyl Chloride
Bromides Creosote Guaiacol
Acetyl Salicylic Acid Salicylic Acid
Sodium Salicylate Methyl Salicylate Minor Salicylates
Glycerophosphates Silver Salts

HEYDEN CHEMICAL CORPORATION
50 UNION SQUARE NEW YORK
180 N. Wacker Drive, Chicago
Factories:
Garfield, N. J. Perth Amboy, N. J.

material lately. The tone is fairly stable. Ruling prices are:—No. 1, drums, car lots, 9⅜c. per pound; drums, less than car lots, 10½c.; barrels, car lots, 9⅝c.; barrels, less than car lots, 10¾c.; five-gallon tins, 11¾c.; one-gallon tins, 13¾c.; No. 3, drums car lots, 8⅞c.; drums, less than car lots, 10c.; barrels, car lots, 9⅛c.; barrels, less than car lots, 10¼c.

Chaulmoogra Oil.—The market was under adequate control with competition being negligible and values showing a strongly maintained position. Sales volume compared well with that in the recent past and varies but little from month to month.

Chrysarobin. — Demand was very light, but the market was steady so far as prices were concerned. The import cost of the material has altered little of late and according to some reports received recently, values abroad were steady in fact.

Cinchonidine.—No further readjustment in prices has taken place. The new and low prices set up in the previous week represented a reduction in production and import costs. Demand was quiet and for quantities of conservative size.

Cinchonine.—The new and lower prices established in the previous week were continued unchanged. They were declared to be firm as quoted and in line with the present cost to replace the article. Requirements of manufacturing consumers were conservative in size and trade remained routine.

Cocaine.—The requirements of the country have changed little for some time past and with the production and sale of the article under close attention of the Federal government, no increase in unsold stocks has taken place. Prices remained in highly stable position.

Cocoa Butter.—The market was up to 9⅜c. to 9¾c. per pound, reflecting a rise in the raw material and a much firmer position generally.

Codliver Oil.—According to the most recent reports from Norway, fishing in Lofoten has decreased further and so far as Eastern Lofoten is concerned, the fishing there has been terminated and the fishermen have moved to Western Lofoten and Finmarken. Some have sailed home. Production of crude oil to March 28 was still behind that in 1932. Spot prices were slightly lower at $18.50 to $21 per barrel, depending on brand, quantity, and quality.

	Fish.	Crude oil, barrels.
1933	78,900,000	42,533
1932	82,800,000	44,447
1931	63,700,000	27,069
1930	125,800,000	44,158
1929	142,700,000	54,922

Corn Syrup.—A strong raw material market continued to keen syrup tending toward further advance, a movement likely to come with any further and material rise in the cost of corn. Demand for syrup was reported to be showing moderate improvement and that has added to the general strength of the market.

Coumarin. — Some distributors of this item indicate a moderate improvement in interest being shown by manufacturing consumers. Prices were very steady with the producers and undertones were firm.

Ephedrine.—Movement was in fair volume and sales were made under conditions fairly propitious for the maintenance of a level and steady price position with competition, but moderately a part in transactions at this time.

Eucalyptol. — The disposition of some sellers to advance prices somewhat sharply a few weeks back has all but disappeared. The market has again settled into a routine position with demand being well maintained in a volume comparing fairly well with that a year ago.

Glycerin.—Refiners still took a firm view on the market and while business was not especially active, the general situation appeared favorable for the maintenance of present schedules for the immediate future at least. Crude glycerin moved somewhat slowly and some reports indicated that at least a portion of the refiners would not pay present asking prices for the crude material. Furthermore, the sales of smaller producers of crude have been light enough to encourage the opinion that they will be the first to meet refiners views. In the meantime all buyers of glycerin were showing conservatism in placing orders, preferring to await later developments before proceeding very far in covering future requirements.

CHICAGO, Apr. 13. — The glycerin market gives evidence of being in good shape. Crude is reported as being firmer in various quarters, without being actually higher in price. C. p. material is bought fairly well, and has a good tone. Glycerin as a whole is apparently strong. Ruling prices of leading sellers are:—Dynamite, 8¼c. to 8½c. per pound, soap-lye crude, 80 percent basis, 4⅝c. to 5¼c.; c. p., car lots, 9¾c. to 10c.; c. p., returnable drums, 10¼c.; saponification, 88 percent basis, 5c. to 6c.

Hydrogen Peroxide.—Protection of somewhat larger requirements expected to develop with the summer months is going quietly forward in company with a price position that is at least very steady. Production has been scaled close to reasonable expectations concerning the needs of buyers during the months ahead.

Hydroquinone.—With the season when demand should increase drawing rapidly to hand, the market appears to be in a position fairly favorable for buyers. Decreased production in the motion picture industry has served to reduce consumption of photographic chemicals to a considerable extent. Prices were held unchanged last week.

Iodine and Iodides.—A somewhat quiet but an entirely steady spot market was reported during the past week. Production of iodides appeared to be under careful control to prevent accumulations of surplus stocks of manufactured goods. The situation in potash iodide was somewhat unsettled but prices were reported to be slightly firmer in some quarters.

Iron Citrate.—Prices held unchanged, in contrast with a rather sharp drop in quotations for soda citrate. Demand for iron citrate was somewhat conservative but prices were about steady.

Iron-Ammonia Citrate.—The undertone of the market was fairly steady and demand for the product was about even with that in recent weeks. The position was in somewhat sharp contrast with that of soda iodide, quotations for which were reduced last week.

Lithium Citrate.—Trade was dull but prices were steady and competition appeared not to be especially active in the local market because of the rather well sustained cost to produce the material.

Magnesia.—Leading importers of this article indicated that they were awaiting the development of an enlarged demand, a development which they felt confident must come if ordinary manufacturing requirements of numerous manufacturing consumers are to be covered. Local quotations were very firm and those abroad were well maintained.

Menthol.—Inactivity on the part of buyers generally kept the price structure somwehat soft and tended to emphasize the competitive character of the market as a whole. While prices from Japan have been somewhat easier at times, the situation there has not been so unsettled as that on spot. Quotations were $2.90 to $3 per pound, according to seller and quantity.

Mercurials.—The situation changed little. Basically, the market was firm to strong because of the small stocks of quicksilver that are available and continued advance in prices for that article. Demand for mercurials was fair to good according to seller and article. The tendency in prices was upward.

Milk Powder.—Production has yet to expand and from general conditions in the principal milk production areas it is not certain that a season of flush production will develop in the very nearby future. Prices were firmly maintained throughout the period and so far as could be ascertained, no tendency toward shading or competition was present.

Opium.—The market was being watched closely by the makers of opiates as the operation of the Turkish Government monopoly on opium was expected to get under way in the nearby future. Its effect on prices is being awaited with some concern.

Potash Citrate. — Prices held unchanged, in contrast with the substantial cut in quotations for soda citrate, a development that came shortly after the beginning of last week. Call for potash citrate was conservative in volume but fairly steady throughout the period.

Quicksilver.—A fairly good demand for metal in small quantities has been in company with an absence of any but very small production at the domestic mines. The result has been the creation of a market of very firm undertones and the maintenance of prices without the least difficulty; competition has been negligible. On the basis of present production, the present strong position of the article is expected to continue.

Quinine. — Quotations for ethylcarbonate were reduced to 46c. per ounce, thus completing the downward revision of all derivatives of cinchona bark. Leading sellers of quinine salts and other derivatives of cinchona bark expect that the low prices now prevailing may bring about an increased consumption, especially of quinine sulphate and bisulphate. The decline in prices was the severest in years and has brought prices to a point where its use should show an increase.

SAN FRANCISCO, Apr. 8.—The number of inquiries and standing orders continues to overlap the quantity of quicksilver available in this territory, and sellers report the situation very firm, at $53 to $54 per flask. Many opportunities to do business are passed owing to the absolute scarcity of metal. However, the market is kept from rising beyond this point just now owing to the potential entry of foreign quicksilver, a situation the majority of Pacific Coast mines are unable to face.

Rochelle Salt.—A steady price position was reported and demand was said to have been very fair throughout the period. Competition has been somewhat less aggressive than it was a short time back and the market undertones have strengthened accordingly.

Saccharin.—Seasonable business has shown a slight increase of late, being in line with expectations but hardly realizing them to the full. Prices remained highly stable with competition being reported as being nil.

Seidlitz Mixture.—Business was somewhat quiet but prices appeared to be fairly steady and competition played little part in the securing of orders so conservative in size as they were during the past week. The market as a whole was called much steadier.

Silver Nitrate. — The schedule of prices since the last report at the following levels, covering quantities of 100 ounces; small lots cost from 1c. to 2c. more per ounce, and quantities of 500 ounces are quoted at about 1c. less. Comparisons of prices for bullion in New York and London are also provided:—

	Per ounce		
		Bullion	
	Nitrate. Cents.	New York. Cents.	London. Pence.
Saturday	21	27	17¼
Monday	21⅛	27⅝	17⅝
Tuesday	21⅛	28	17¾
Wednesday	21⅛	27⅝	17⅝
Thursday	21½	28¼	18
Friday	21½	28½	..

• Market closed for Easter holidays.

Soda Citrate.—Quotations were cut sharply last week. Those for USP VIII were 1½c. lower at 24c. to 29c. per pound, quoted over that range according to quantity; USP X 2c. lower at 30½c. to 35½c., same conditions. The reduction was caused directly by keen competition. Raw material prices were unchanged.

E. I. McClintock, vice-president of the Bayer Company, Inc., has accepted the chairmanship of the drugs and pharmaceuticals division of the trade and industry committee of the Salvation Army's united appeal for funds. Mr. McClintock is organizing the drugs and pharmaceuticals field for participation in the fund-raising campaign which is now under way.

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 5

C/P
CHEMICALLY PURE GLYCERINE U. S. P.
PROCTER & GAMBLE
Largest Producers and Refiners of
CHEMICALLY PURE GLYCERINE
Packed in drums and cans
Also other grades—Stocks in principal cities
Gwynne Building, Cincinnati, Ohio
205 East 42nd Street, New York City

DISINFECTANTS
COAL TAR
Baird's
PINE OIL
CRESOL and CRESOL COMPOUNDS
for the Wholesale Drug Trade
BAIRD & McGUIRE, Inc.
Manufacturing Chemists
HOLBROOK, MASS. ST. LOUIS, MO.

"Pattinson's" Magnesias
— Oxide
— Hydrate
— Carbonate
U. S. P. and Technical
Use
"Pattinson's" LEVISSIMA for Milk of Magnesia of superior quality. Fine suspension, pleasant taste, smooth texture and uniformity.
SCHOFIELD-DONALD COMPANY
INCORPORATED
154 Nassau Street
New York
Sole Agents for
The Washington Chemical Co. England
"Pattinson's" Magnesias
The Western Chemical Co. Scotland
"Thistle Brand" Magnesias

White Mineral Oils
(Viscosity Range between 80 and 350)
U. S. P.—Technical Grades
Refined by Oelwerke Julius Schindler, Hamburg
Sole American Representatives:
S. SCHWABACHER & CO. INC.
59 Pearl Street New York

MILK SUGAR
NATIONAL BRAND
National Brand Sugar of Milk has been the standard of Quality the world over since 1883.
Powdered Granular Impalpable
NATIONAL MILK SUGAR CO., Inc.
205 E. 42nd St., New York. N. Y.

Muscle Shoals Plan Agreed On by Congress

(Continued from page 17)

the neucleus from which the other and related projects would develop.

Both House and Senate bills call for the creation of a corporation to be known as the Tennessee Valley Authority, which the President described as being "clothed with the power of government but possessed of the flexibility and initiative of private enterprise." This corporation would issue bonds and construct public works largely as it saw fit, its first enterprises being operation of the present plants at Muscle Shoals and building a supplemental dam at Cove Creek on the Clinch river. Electric power would be generated and sold to municipalities and industries.

To Improve Output

As to fertilizer, both bills declare it the policy of the government to utilize the Muscle Shoals plants as far as may be necessary to improve and cheapen the production of fertilizer and fertilizer ingredients. The Norris bill directs the authority to manufacture fixed nitrogen by any process it thinks proper and to arrange for its experimental use, and the demonstration of new methods of manufacture and application of fertilizer. The House measure authorizes the production, to an unspecified amount, of any fertilizer or fertilizer ingredients in concentrated form and suitable for use on the land, and their sale at cost plus 4 percent. Both bills also would authorize use of the nitrogen plants for the production of munitions in time of war.

While fertilizer manufacturers naturally object to any proposal to sell fertizer in large amounts at low cost from a subsidized government plant, the project of the House bill is much less harmful to the industry than some of its predecessors which would have required the production of specified amounts of nitrate and superphosphate.

The major proposals in the bill, which relate to utilization of the nitrogen plants at Muscle Shoals, are portions of section 5 and the whole of section 17. These provisions are as follows:—

Section 5. The board is hereby authorized and directed

(a) To contract with commercial producers for the production of such fertilizers or fertilizer materials as may be needed in the government's program of development and introduction in excess of that produced by government plants. Such contracts may provide either for outright purchase by the government or only for the payment of carrying charges of special materials manufactured at the government's request for its program.

(b) To arrange with farmers and farm organizations for large scale practical use of the new form of fertilizers under conditions permitting an accurate measure of the economic return they produce.

(c) To co-operate with national, State, district, or county experimental stations or demonstration farms for the use of new forms of fertilizer or fertilizer practices during the initial or experimental period of their introduction.

(d) The board shall manufacture fixed nitrogen at Muscle Shoals by the employment of existing facilities, by modernizing existing plants, or by any other process or processes that in its judgment shall appear wise and profitable for the fixation of atmospheric nitrogen.

(e) Under the authority of this act the board may make donations of the total product of the plant or plants operated by it, to be fairly and equitably distributed through the agency of county demonstration agents, agricultural colleges or otherwise as the board may direct, for experimentation, education, and introduction of the use of such products in co-operation with practical farmers so as to obtain information as to the value, effect, and best methods of use of same.

(f) The board is authorized to make alterations, modifications, or improvements in existing plants and facilities, and to construct new plants.

(g) To establish, maintain, and operate laboratories and experimental plants, and to undertake experiments for the purpose of enabling the corporation to furnish nitrogen products for military and agricultural purposes in the most economical manner and at the highest standard of efficiency.

(h) The board shall have power to request the assistance and advice of any officer, agent, or employee of any executive department or of any independent office of the United States, to enable the corporation the better to cary out its powers successfully, and the President shall, if in his opinion the public interest, service, or economy so require, direct that such assistance, advice, and service be rendered to the corporation, and any individual that may be by the President directed to render such assistance, advice, and service shall be thereafter subject to the orders, rules, and regulations of the board.

(i) Upon the requisition of the Secretary of War or the Secretary of the Navy to manufacture for and sell at cost to the United States explosives or their nitrogenous content.

Section 17. It is hereby declared to be the policy of the government to utilize the Muscle Shoals properties so far as may be necessary to improve and cheapen the production of fertilizer and fertilizer ingredients by carrying out the provisions of this act.

Methanol and Acetate of Lime Data: February

Monthly statistics on production, shipments, and stocks of methanol and acetate of lime, based on data reported to the Bureau of the Census by thirty-four establishments, are presented in the table below:—

Methanol

	Gallons						
	1931.	1932.	1933		Totals 2 months (Jan.-Feb.)		
	February.	February.	January.	February.	1931.	1932.	1933.
Refined—							
Wood distillation—							
Production	223,144	111,280	165,860	117,236	531,917	291,782	283,096
Shipments	225,279	106,811	59,546	88,435	392,648	218,864	147,981
Stocks, end of month	465,311	222,368	324,489	353,290	.....	.....	.....
Synthetic—							
Production	662,735	546,086	352,748	339,300	1,432,288	1,131,966	692,048
Shipments	402,650	473,993	512,781	625,484	913,353	860,876	1,138,265
Stocks, end of month	1,614,975	2,149,697	3,050,641	2,764,457	.....	.....	.....
Crude—							
Production	478,272	224,508	312,481	256,826	1,019,747	433,983	569,307
Shipments	*	*	244,185	272,505	*	*	516,690
Stocks, end of month	486,452	419,985	297,163	281,484	.....	.....	.....

Acetate of Lime

	Pounds						
Production	7,073,296	2,848,989	4,741,827	3,747,754	15,015,492	5,342,876	8,489,581
Shipments	3,518,468	3,557,068	1,713,308	1,963,434	8,713,134	6,555,913	3,676,742
Stocks, end of month	28,932,342	8,615,811	10,162,338	11,946,658	.....	.....	.....

Wood

	Cords						
Consumption	44,933	30,038	30,642	26,179	95,747	51,905	56,821
Stocks, end of month	397,715	321,890	226,194	262,119	.....	.....	.....
	Cords per day						
Total capacity	2,499	2,472	2,609	2,609	.....	.....	.....
Total operating	2,099	1,866	1,626	1,626	.....	.....	.....
Shut down	400	606	983	983	.....	.....	.....

* Data not available.

Personal Paragraphs

John T. Barnett, president of the Mountain Producers Corporation, and Fred Farrar, director, and general counsel for the Colorado Fuel and Iron Company, were appointed trustees for the Colorado School of Mines, Golden, by Governor Johnson.

William J. Rice, formerly with the Blatz Paint & Varnish Company, Company, Louisville, who later reorganized the Reliable Paint Company, now operated by his son, William E. Rice, has joined the Mitchell Paint Company, with plans for developing that business.

Charles L. Huisking, president of Charles L. Huisking & Co., drug merchant, this city, will sail for London April 19. He will make his headquarters in the office of Wheeler & Huisking, of which firm he is a member. Later, he will go to Norway for conferences with the officers of the Peder Devold Oil Company, codliver oil producer. Mr. Huisking represents this company in the United States.

Donald Callahan, president of the Callahan Zinc-Lead Company, Wallace, Idaho, was elected a director of the American Mining Congress.

Chester E. Rahr has been elected a director of the Certainteed Products Corporation, succeeding Lamont J. Belnap.

Dr. H. S. Knight, professor of geology at the University of Wyoming, Laramie, is head of the recently created State Geological Survey Department. It is expected that work of this department will be of great aid to the mining industry in Wyoming.

Harry Noonan, president of The Drug Products Co., Long Island City, N. Y., is sailing April 28 on the Monarch of Bermuda to Hamilton, Bermuda, where the twenty-ninth district Rotary conference will be held. This is the first time that this district conference has been held outside the State of New York. Mr. Noonan is past president of the Queensboro Rotary Club, Long Island City.

Exchange X BRAND

CITRIC ACID U.S.P.

(CRYSTALS - GRANULAR - POWDERED)

MADE FROM AMERICAN LEMONS

by the Exchange Lemon Products Company of Corona, California. Backed by the Sunkist group of 13,200 citrus growers—largest in the world. Immediate shipments from warehouse stocks in New York, Chicago, Philadelphia and St. Louis. For prices on kegs, barrels or carloads, consult any of the following distributors:

DISTRIBUTED EAST OF THE ROCKIES BY

Mallinckrodt CHEMICAL WORKS, St. Louis, Philadelphia, New York, Chicago
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SWANN CHEMICAL COMPANY, Birmingham, Alabama
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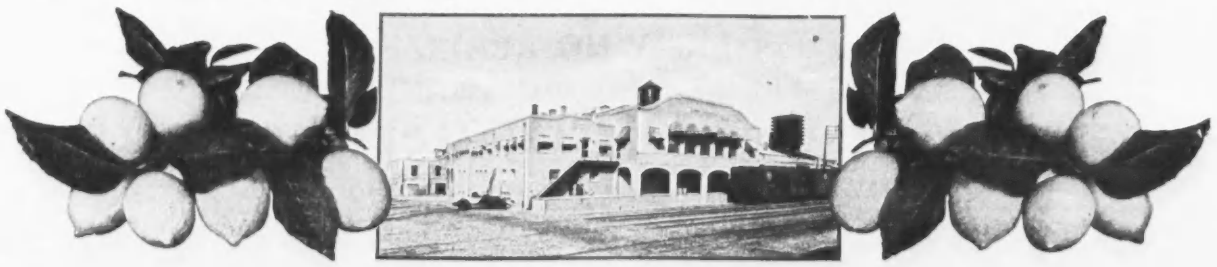
Products Dept.—CALIFORNIA FRUIT GROWERS EXCHANGE—Ontario, Calif.



Chemical Progress In Synthetic Resins

(Continued from page 17)

As nonfibrous cellulose derivatives are distinctly resinous, we may also consider them in this field. A cellulose nitrate, pyroxylin, has long been known but is hardly safe for use in the normal hot molding compositions. However, the more recent cellulose acetate mixtures withstand, without decomposition, the molding heat and within the last few years have taken a very definite place in the hot molding thermoplastic field.

Certain rubber-sulphate combinations, as is well known, have some of the properties needed in thermoplastic compositions, yet the drawbacks of sulphur staining on metal molds has been sufficient to keep them out of the rapid molding field and to confine their use to comparatively slow molding and to the inexpensive type of molds ordinarily used in the vulcanized rubber industry. Rubber compositions without sulphur, for instance chlorinated rubber, are ready, under various trade-names, to enter the thermoplastic molding field. The newly announced "Plioform" is described as a sulphur-free rubber product. Also the rubber-like hydrochloride of vinyl acetylene, called by the trade-name, "Duprene," has definite possibilities for special oil-resistant flexible uses.

Many of the unsaturated derivatives of ethylene, for instance vinyl chloride and vinyl acetate, are thermoplastic resinous adhesive materials. These, such as "Vinylite," are finding increased use for special purposes as in phonograph records. Also recently the special vinyl derivative, styrene, has been economically made from ethylbenzene and has made a start, under the trade-name, "Victron," toward meeting a special need in this field. The "Vinylite" materials are said to be very strong and tough. The styrene material, "Victron," is said to have very high electrical properties. Both are light-colored and are stable in color to light exposure.

All these thermoplastic materials have their special virtues and faults peculiar to each announced product. If one were guessing on the basis of present knowledge, one would likely say that balanced cellulose acetate compositions will prove the best and have the largest volume use in this light-colored, light-resistant field of thermoplastic products.

The phthalic anhydride-glycerol compounds, known as glyptals, commercially known for about fifteen years, constitute a sort of halfway group between the thermoplastic and the heat-hardening resins. For special varnish and lacquer use the alkyds are modified with oils, oil acids, organic acids to replace phthalic, and with natural resins.

Aminoplastics and Others

Gradual improvements for special purposes have been made in the phenolic resin field, for instance substitution of furfuraldehyde for formaldehyde. In addition, a commercially new resinoid group, the aminoplastics, has made its appearance. One notices also the advance publicity announcements of many other resinoids which are claimed to have great merit but generally lack commercial confirmation. However, to find an industrial use within an accepted price range relating thereto is something of great importance. This acceptable price range for delivered properties is the rock upon which most of the newly rediscovered resins and resinoids are wrecked.

Phenol and formaldehyde react to give the phenolic resins and resinoids as shown above. Any hydroxy-substituted aromatic ring compound can be used in place of phenol to give both resins and resinoids. Any substituted formaldehyde, for instance benzaldehyde, its polymers and equivalents, or some special unsaturated substituted formaldehyde, for instance furfuraldehyde and acrolein, only these will give rapid-hardening resinolds. The older phenolic resinoids have been improved by the new liming process of Redman.

Urea is a commercial example of a nitrogen compound reacting with aldehydes. In place of urea one may use thiourea, substituted ureas, dicyandiamide, guanidin, paratoluenesulphonamide, anilin, and in fact almost any substituted ammonia, to give some variety of resin or resinoid.

Most aldehydes condense with themselves to give resins. Ketones may be used for part of the aldehyde. In fact, resin-like residues can be obtained from almost any organic chemical reaction series that tend to give a mixture of several fairly similar solid products. For instance, we note an article in the last *Chemical Abstracts* (March 20) under the title, "New Type Resin from Phenolphthalein." Glancing at the abstract we see that another new ether of phenolphthalein is resinous.

Basis of Resinous Properties

Much past confusion has resulted from the failure to understand the essential physical basis for resinous properties. The resinous properties of any chemical mass are always due to the mixing of chemical influences. Resinous masses differ from their pure components in much the same way as metallic alloys differ from the pure metals.

We have divided the mixtures which result in resins into three groups:—

A. Physical mixtures of widely different chemical compounds.

B. Chemical compounds having two or more unwieldy components of different types (oxyresins).

C. Mixtures of chemical compounds of same general composition but of various molecular sizes (polyresins).

There is one known cause for resinous properties and that cause may be expressed as a mixture of properties. The resinous mixtures, however, may be either physical mixtures or this curious condition which we have called the chemical mixing of properties. We may obtain this mixing of chemical properties in two ways:—(1) By mixing different chemical compounds, or (2) by mixing chemical radicals on the same compound.

While in industrial practice a resinous mass is mainly one desired resin, yet the properties of the mass are often varied in a desired direction by admixture with other chemicals dissolved therein. Moreover the resin chemist must never forget that now sufficient data are available so that one can practically duplicate the properties of any desired resin by means of mixtures of entirely different compounds.

It is in the oxyresins, or class B above, that we at present find the most useful synthetic resins and resinoids. The chemistry of the carbonyl group gives one a common thread on which to string the different resinous compounds in this class.

Trade News Briefs

The Standard Oil Company of Venezuela, subsidiary of the Standard Oil Company of New Jersey, has opened up an entirely new oil field in Venezuela in the Orinoco delta near Pedernales. The well had an estimated flow of 5,000 barrels daily.

Canadian coaltar product exports in 1932 included 3,017,552 gallons of coaltar and pitch, and 274,598 gallons of creosote oil. Among imports was the item of 422,427 gallons of heavy coaltar oil. In the preceding year, 2,089,020 gallons of this article were imported.

Kosmoteek Laboratories, Inc., to manufacture cosmetics, perfumes, etc., this city, has been chartered at Albany with $20,000 capital. Lillian Malinsky, Maxwell Goldstein and Jos. M. Senfeld, 225 Broadway, this city, were named as directors and subscribers.

The Tennessee Corporation reported a net loss of $759,990 for the year ended December 31, 1932, after expenses, interest and depreciation. This compared with a net profit of $5,365, or less than 1 cent a share, in 1931. Sales were $4,539,016, against $7,572,760 in 1931.

The Oil, Paint and Drug Reporter

in its weekly record of prices and interpretative market comment is a

Continuous Indicator of Market Conditions

As such it is consulted every day by

Producers - Distributors - Consumers

— OF —

Industrial Chemicals, Coaltar Products, Dyestuffs and Tanstuffs, Paint and Varnish Materials, Fertilizer Materials, Oils, Drugs, Gums, Waxes and Petroleum Products

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12 GOLD ST., NEW YORK

Botanical Drugs, Spices

Hungarian Paprika, Rendered Sweet by Removal of Veins from Peppers, Competing Here with Spanish Goods--Roman Chamomile, Digitalis, and Gentian Up

A quiet strengthening of consuming demand for botanical drugs was noted during the past week. The gains did not affect the entire list and, to a considerable extent, were confined to specialties. However, undertones in the market as a whole were considerably improved by the gain in movement of a number of articles into consuming channels, and at the end of the trading period under review spot prices were up substantially, and most of those occupying an unchanged position were at least firmer.

The stronger articles in request during the period were Roman chamomile, digitalis, and gentian. All closed the week with a fair rise and all were in exceptionally firm position because of the fact that stocks on the spot were down to very low limits and replacements were not readily obtainable at prices which would suggest an early return of spot quotations to former levels.

An interesting development that came to light during the week was the marketing of Hungarian paprika in this market. A good many years ago Hungary supplied large quantities of this pepper to the American market. Advent of the "sweet' Spanish article, however, finally resulted in the hot Hungarian pepper going out of use. Hungarian scientists have found a way to remove most of the heat from the product of that country. Color has always been a prime requisite in paprika, and on that basis the Hungarian material is said to be much ahead of its Spanish competitor. The price is competitive with the Spanish material, which last week lost all of its recent primary market advance.

Barberry bark of root and tree was shaded a trifle under competition. Canella moved in favor of buyers and ended the week moderately easy. By contrast, the position of cassia fistula was interesting. Direct news from Macassar indicated that no more stock remained there, export having been stimulated in order to make a bare market during the heated term, when this article easily becomes wormy.

Activities in the domestic primary markets are getting under way. Workers are busy on the Spring dug or collected botanicals, but as prices offered for most of the materials are quite low, stimulation of collection is considered not to be likely. Reports from abroad indicated that cultivated botanicals will not be grown to a normal extent this year.

Entries at the Port of New York of anise, caraway, celery, coriander, cumin, dill, fennel, mustard, poppy, psyllium and sesame seeds since the week of April 20 and detentions of these seeds by the Department of Agriculture because of the presence of matter rendering the seeds unfit for human consumption, were as follows:—

	Bags	
	Entered.	Detained.
Anise	2,951	1,114
Caraway	33,216	19,266
Celery	3,170	17,966
Coriander	7,539	731
Cumin	1,731	1,111
Dill	1,078	240
Fennel	854	667
Mustard	26,788	3,701
Poppy	42,880	3,955
Psyllium	27,946	14
Sesame	.....	3,203
Totals	150,715	34,520

Price Changes

Prices were changed during the past week as follows:—

Advanced

Chamomile, Roman, 3c. per lb.
Cassia fistula, ½c. per lb.
Digitalis, 1c. per lb.
Gentian root, 1c. per lb.
Ginger, Lemon Cochin, ¼c. per lb.
Mandrake root, ¼c. per lb.
Poppy seed, Hungarian, ¼c. per lb.
Pimento, ¼c. per lb.
Senega root, 1c. per lb.

Reduced

Barberry, root bark, ½c. per lb.
tree bark, ½c. per lb.
Broomtops, ½c. per lb.
Canella bark, ½c. per lb.
Celery seed, 1c. per lb.
Cassia, Batavia No. 1, ¼c. per lb.
Clove, ¼c. per lb.
Mustard seed, California, ¼c. per lb.
Dutch, ¼c. per lb.
English, ¼c. per lb.
Pepper, white, Java Muntok, ¼c. per lb.
Singapore Muntok, ¼c. per lb.
red, Japanese chillies, 2c. per lb.
Pomgranate root bark, ½c. per lb.

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
62.4	62.4	62.6	68.1

Market news that may have developed after this report was sent to press will be found on page 2.

Balsams

Peru. — Principal providers of this article declared that the demand from manufacturing consumers had been without improvement; that the market was fairly steady in undertone; and that competition was not current to an important degree. Stocks were of moderate size but were well distributed throughout the spot.

Tolu.—Jobbing demand was current throughout the past week; purchases in larger units were not very common. Quotations were steady on the basis of 65c. to 70c. per pound and undertones seemed to be fairly steady. The price was in line with replacement costs.

Barks

Barberry. — Under competition of a somewhat more active sort, sales of this article were made at a price fractionally below previous quotations. The market was 15c. to 16c. per pound for bark of root and 10c. to 11c. for bark of tree.

Canella Alba. — Business was done at 24½c. to 25c. per pound last week, though a more general minimum quotation was 25c., which was firmly held in some directions. Demand was of jobbing description.

Cascara Sagrada. — Stocks held on the Pacific Coast were reported to be small and in strong hands at the beginning of the crop season. Little information concerning the attitude of dealers as regards contract prices has come here from the Coast but from the little that can be learned it was not evident that the prices to prevail would be sufficiently high to bring about a marked increase in the output. Spot prices were firm but demand was small.

Cottonroot. — Manufacturing consumers have had but little need to come into the market for more than jobbing lots of this article. The market has been dull for many weeks but notwithstanding that prices have remained very steady under light competition.

Lemon Peel. — While not all sellers were meeting minimum prices quoted on the spot, the market as quoted was based on business of substantial sort for delivery monthly over a year.

Orange Peel. — Some excellent business has been proposed by one of the large food companies whose inquiry has resulted in more attractive prices being named on business said to involve substantial quantities to be delivered each month over one year.

Pomegranate. — Root bark was quoted at 26½c to 27c. per pound and though fractionally more attractive in price, little call for the article prevailed. Tree mark remained steady at unchanged quotations.

Beans

Tonka. — Sales in small lot quantities were reported to be very fair in number and moderately active throughout the past week. Business done created very steady undertones and prices were well maintained.

Vanilla.—Spring inquiries increased moderately and while signs did not seem to forecast a sharp expansion in local sales, a pickup in trade was in evidence and the market had a somewhat improved undertone throughout the period. However, competition was still a deterrent to an increase in prices and with ample stocks being reported available, better returns to sellers were not a part of the nearby future expectations. In that somewhat less excessive shading of prices prevailed, the market was to that extent an improvement over that in recent weeks.

Berries

Cubeb.—Business was steady, though orders involved small and strictly jobbing quantities throughout the entire period. Prices were without development, being well maintained and in line with the cost to replace present holdings.

Raspberry.—A moderate movement was noted and the market remained

Current prices on botanical drugs and spices are given in the alphabetical list of prices beginning on page 5

PROFESSIONALLY HOPKINS BRAND MILLED
ANALYZED - STANDARDIZED
CRUDE DRUGS
PHYSIOLOGICALLY TESTED
Aconite Root
Cannabis American
Digitalis
Ergot, Spanish
Red Rat Squill
Squill Root, White
Strophanthus

CHEMICALLY TESTED
Asafoetida
Belladonna
Cinchona
Derris Root
Goldenseal
Ipecac Root
Rhubarb Root
CRUDE J. L. HOPKINS & CO. NEW YORK DRUGS

CRUDE DRUGS
WHOLE AND MILLED
PEEK & VELSOR, INC., NEW YORK
ESTABLISHED 1840 100 GOLD STREET

PYRETHRUM PRODUCTS
• STANDARDIZED • POWDERED
• HIGHEST TOXIC VALUE • GRANULATED
• CONSTANT UNIFORMITY • CONCENTRATED OIL EXTRACTS
Leaders in Pyrethrum Products for Almost a Half Century
McCORMICK & CO., INC.
BALTIMORE, MARYLAND

AMTORG TRADING CORPORATION
261 Fifth Avenue New York City
IMPORTERS FROM U. S. S. R. (RUSSIA)
of Various Botanicals, Chemicals, Essential Oils
STOCKS AVAILABLE
Lycopodium Quince Seed Gum Tragacanth
Coriander Seed Isinglass Wormseed, Levant
Valerian Root Santonin Oil Sage, Clary
Oil of Coriander Nicotine Sulphate 40%
Anabasine Sulphate 40%
ORDERS TAKEN FOR FUTURE DELIVERIES
Juniper Berries Elecampane Root Poke Root
Soap Root

PENICK'S
DOUBLY TESTED
PYRETHRUM POWDER
A PYRETHRUM CONCENTRATE OF IDEAL STRENGTH
PYREFUME Super 30
Representing 30 Pounds of Assayed, Tested Pyrethrum Flowers to the gallon, with 3.375 gms. Pyrethrins to each 100 ccs.
DERRIS ROOT IN FINE POWDER, ROTENONE
ROTENOYDS EXTRACTS, POWDERED AND LIQUID
WRITE FOR PARTICULARS
S. B. PENICK & COMPANY
132 Nassau Street - - - - New York, N. Y.

quite steady with no dealers showing disposition to accept firm orders at less than 24c. to 25c. per pound. Stocks were not excessively large.

Flowers

Arnica.—Price declines have ceased and a firmer tone has developed with values on the basis of 7½c. to 8c. per pound being well maintained notwithstanding the absence of a demand much larger than that of jobbing proportions.

Chamomile.—Roman flowers were advanced again, this time to 33c. to 35c. per pound. The market was firm to strong and stocks of very small size were in strong hands, who reported a very good call for the article. Hungarian flowers were steady to firm on a fair-sized call.

Linden.—Inquiry was slightly improved and some dealers reported a moderate increase in sales. Prices for both varieties of the article remained very steady.

Rosemary.—The market was firm at 35c. to 40c. per pound. Though the demand was not large, the supply was moderate in size and the cost of replacement was such as to give considerable strength to local values.

Saffron.—Slightly more competition was reported, and although prices were unchanged, some tendency to meet buyers' views on quantity lots was noted. The cables from Spain showed prices remaining firm.

Herbs and Leaves

Broomtops.—Though inactive on the whole, some business done last week was taken at 7½c. to 8c. per pound, a fractional concession from previous quotations.

Buchu.—The primary market prices were firm and stocks there were below normal, according to reports from abroad. Spot quotations were steady, though not a great deal of interest has been shown in the article for some time past.

Digitalis.—Quotations were raised to 18c. to 19c. per pound and because of undersupply and high cost of replacements, the market was strong with the tendency being toward still further advances in prices.

Henna.—Keen competition, but a very good sized volume of sales was reported last week. Open quotations were without change and were so close to first cost of merchandise as to leave little margin for further shading.

Sage.—The market was steadier and some quarters were disposed to ask slightly higher prices. Getting them was another thing when orders were carefully shopped before being placed. The supply locally was fairly good in size.

Stramonium.—The foreign market was slightly firmer, though some agents had old prices still in force and fair quantities available for shipment. Spot business was steady, but distinctly routine in character.

Miscellaneous

Cassia Fistula.—Information obtained direct from the primary market confirmed the fact that further shipments were impossible. Stocks were said to have been moved out in order to avoid losses through the article becoming wormy in hot weather. Shippers have already made some advances to the planters, same applying on the next crop. Local agents are offering September-December shipments. The crop usually arrives at Macassar between October and January.

Guarana.—The market has become considerably steadier and during the past week sufficient business was done to put the article in line with a possible advance in local values, according to the trade. Stocks were not so burdensome as they were at one time. Furthermore, the replacement situation was no longer so weak.

Hops.—For the time being the brewers have succeeded in securing sufficient stocks of hops to take care of immediate production. The market for hops was very steady. Official estimates of new crop acreage on the Pacific Coast may be expected within a month and information in hand indicates an increase over that last year. Growing conditions are mainly favorable, though the season is somewhat late. Reports from Europe suggest that stocks there are almost extinct and the tendency in prices named on the small quantities remaining was strongly upward. Sales on the Pacific Coast last week included 150 bales that brought the grower 28c. per pound in Oregon and 300 bales brought 27½c. per pound to a California producer.

Kamala.—Sales volume continued to be at low ebb and the market was still a disappointing affair to most dealers in the article. Prices remained easy at 19c. to 20c. per pound.

Roots

Arrowroot.—Movement was in very fair volume, according to leading importers of this article. The seasonable expansion in needs is close at hand but will find sellers well supplied with powder of excellent quality at reasonable prices.

Gentian.—Whole root, available in very small quantities, and not available in all quarters, was priced strongly at 17c. to 18c. per pound with an upward tendency noted. Powder and granular were in fair request but the supplies of milled goods were likewise light.

Jalap.—Inquiry improved slightly and the market had a moderately improved undertone throughout the period. Prices were somewhat firmer in most quarters and competition was less apparent in keeping with the fact that spot and primary market values were strictly in line.

Mandrake.—The spot market was firmer at 8c. to 8½c. per pound and while business was but little, if any, improved, the fact that no important surplus of stocks exists at the beginning of the new growing season has tended to stiffen market undertones considerably.

Senega.—Quotations were 31c. to 32c. per pound but it was difficult to discover much improvement in demand for either domestic or export to account for the slightly higher level of values. However, prices were said to be comparatively low and the probable result would be a very moderate collection this year.

Squill.—Consumption of red squill continued to be very good by reason of the drives against rodents in the numerous agricultural districts of the country. Prices were firmer. White squill was not in much demand but quotations were at least very steady.

Unicorn.—Undertones were steady. Stocks have decreased considerably during the Winter months and at the moment the holdings of the local dealers are conservative in size. Prices have become quite steady and competition has decreased.

Valerian.—Small stocks were more than a sufficient reason for the very firm position of spot quotations noted on the basis of 14½c. to 15c. per pound. However, an added element of firmness was the fair movement of spot stocks into consuming channels.

Seeds

Anise.—Spanish shippers stated that the market in Spain had retained its recent advance and was in firm position. Prices for spot seed were higher at 7½c. to 8c. per pound. Star seed was unchanged. Demand was reported to have been very fair.

Canary.—The primary market remained weak and poorly supported by orders. Local quotations were unchanged, but they were low and in line with the record low prices at the source of supply. Demand was irregular.

Caraway.—A steady market here and abroad was noted, and the situation lacked new development. Buyers were somewhat reserved in this market, awaiting further developments before placing more business of substantial size.

Celery.—Marseilles was somewhat lower and easier, with offerings showing something of an increase. Spot quotations reflected the drop, ending the week at 34c. to 34½c. per pound. Movement out of spot stocks into consuming channels was along narrow lines, buyers showing reserve and expecting further declines in foreign quotations.

Mustard.—California, Dutch and English seed were lower on the spot, quotations being: California, 7c. to 7½c. per pound; Dutch, 7¾c. to 8¼c.; English, 7¾c. to 8¼c. Other varieties of this seed were not changed. The absence of normal trading out of spot lots served to ease sellers' views, regardless of the fairly steady position of the materials in the three primary markets.

Poppy.—Hungarian seed was offered again from abroad and on an exchange of cables prices were driven down considerably and brought the article into fairly close alignment with that held by the Dutch material. Samples of Turkish seed were also received, but the presence of a deal of foreign matter made its admission into the country improbable. Hungarian seed on the spot was priced at 13½c. to 14c. per pound, identical with quotations for Dutch material.

Quince.—The market remained fairly steady in most instances but with supplies ample and sellers eager for more business, conditions were favorable for acceptance of buyers' views.

Spices

Cassia.—Batavia No. 1 was lower at 7½c. to 7¾c. per pound. Prices for other varieties of cassia were unchanged. Demand was on jobbing account in most instances. Stocks were ample.

Clove.—Further declines in the replacement market were reflected locally notwithstanding the fact that stocks on the spot were comparatively small. Quotations became 8¾c. to 9c. per pound and trade remained small and for prompt requirements only.

Ginger.—Lemon Cochin was higher at 3¾c. to 4c. per pound. Jamaica root was somewhat steadier, though the plentiful supplies of new crop root were not moving very actively into consuming channels. African root was in somewhat improved demand but the gains failed to affect quotations.

Nutmegs.—West India nutmegs were lower at 6c. to 6¼c. per pound. Prices for 80's and 110's were unchanged but received but moderate support from buyers for consumption. Replacement cables were fairly attractive to buyers with substantial requirements to fill.

Paprika.—The feature was the return of Hungarian paprika to this market. The producers have found a means of turning the formerly hot Hungarian article into one described as being "sweet" though it is still a trifle on the hot side. The prices compared favorably with that for Spanish material and the color was said to be far superior. The advent of Hungarian material at competitive prices brought about a decline in prices for Spanish, contrasting with the recent advance. Spot quotations were unchanged.

Pepper.—White Java Muntok and Singapore Muntok were a fraction lower at 8¾c. to 9c. per pound. Black peppers were unchanged. Hontaka Japanese red peppers were lower for shipment and spot quotations were reduced to 14c. to 14½c. per pound. Birdseye and Mombassa red peppers were unchanged.

Pimento.—The market moved up a fraction on better demand, reaching 3¾c. to 3⅞c. per pound during the period and ending the week in fairly firm position as demand continued to show improvement.

Current prices on botanical drugs and spices are given in the alphabetical list of prices beginning on page 5

Trade News Briefs

Chilean sulphur exports increased from 4,157 metric tons in 1931 to 9,558 tons in 1932.

The Citrous Oil Company of Acireole, one of the largest refiners of citrous oils in Sicily, has cut its capitalization from 6,000,000 lire to 3,000,000 lire, following an operating loss of 1,139,916 lire in the past two years.

The Mavis Bottling Company of America has reported a net operating deficit of $77,097 for the yead 1932, after charges, but before depreciation. This compared with a net operating deficit of $47,356 also before depreciation in 1931.

The Chickasha Cotton Oil Company has declared a dividend of 25 cents a share on its capital stock payable May 1 to stock of record April 14. This is the first disbursement ordered by the company since April 1, 1930, up to which latter date the stock was on a $3 annual dividend basis.

Polish exports of coaltar dyes in 1932 totaled 100 metric quintals, valued at 78,000 zlotys, compared with exports of 465 quintals, valued at 399,000 zlotys, in 1931. Imports of these products were 2,906 quintals, valued at 6,168,000 zlotys, in 1932, compared with 4,035 quintals, valued at 8,257,000 zlotys, in 1931.

Polish superphosphate producers did not operate their plants during 1932. Stocks on hand at the beginning of the year amounted to 110,000 metric tons, and only 80,000 tons of this was consumed during the year. Older producers expect strong competition this year from the new Polchem factory at Torun.

The Crown Cork International Corporation has reported a net profit of $39,740 for the year ended December 31, 1932, after depreciation, interest, taxes, and other charges. This was equal to 11 cents a share on 359,000 no-par class A shares, and it compared with a net loss of $307,200 in the previous year.

Purboil Laboratories, Inc., has been chartered under the laws of Maryland to deal in medicines, chemicals, etc. Its capital stock is fixed at 100,000 shares, par $1. Harold J. Levin, Josiah S. Hochheimer and Arthur L. Kline were named as incorporators. The company for the present is located at the southwest corner of Park avenue and Franklin street, Baltimore.

The White Rock Mineral Springs Company has reported a net income of $728,484 for the year ended December 31, 1932, after expenses, taxes and other deductions, comparing with $1,126,540 for the year 1931. After payment of dividends there remained a surplus of $465 at the end of 1932, as against a deficit of $111,608 after dividends at the end of 1931. Current assets as of December 31 were $1,658,147, and current liabilities totaled $341,608.

Investigation of odors from manufacturing plants near the Mystic River, especially in the city of Everett, Mass., should be discontinued, a committee of the State Senate has reported, refusing to accept a recommendation by the State Department of Public Health. The proposal for further investigation was opposed by the Merrimac Chemical Company, the Boston Consolidated Gas Company, the Mystic Iron Works, the New England Fuel and Transportation Company and other business groups and individuals, also by the city of Everett.

Hops Prices Raised and Increased Output Looms

Liberalization of the Volstead act to permit manufacture of beer containing 3.2 percent of alcohol by weight, or 4 percent by volume, promises to restore the growing of hops in the United States to a scale comparable with that prevailing before the passage of the eighteenth amendment and the Volstead enforcing legislation.

Hop growers on the Pacific coast are already laying plans to increase the acreage cultivated, and the farmers in New York State are also looking to the restoration of a more than $7,000,000 crop. During the past week a gathering of New York State growers took place in Waterville. The meeting was addressed by Prof. H. H. Wretzel, of the department of plant pathology, Cornell University, and P. M. Eastman, assistant director of the State Department of Agriculture and Markets, Albany.

In 1890 hops were grown in thirty-three counties in New York State. The number of growers totaled 6,258; the land cultivated amounted to 26,166 acres on which were employed 5,167 men; and in that year the crop was marketed for a total value of $6,564,528. Taking the country as a whole, 56,000 acres were devoted to hop-growing in 1899. In 1919, with the advent of prohibition, the acreage was reduced to 16,000 acres. During the next ten years it increased moderately to 23,000 acres. Production in 1899 totaled 49,000,000 pounds; in 1909, 40,700,000 pounds; in 1919, 19,700,000 pounds; and in 1929, 31,200,000 pounds. The value of the 1899 crop was $7,845,000; 1919, $10,365,000; 1929, $5,796,000.

Imported hops had always played an important part in supplying the requirements of the United States, but the advent of prohibition cut importations severely. In 1914, imports totaled 5,360,700 pounds. The beginning of the World War in that year resulted in the imports' jumping to 11,710,500 pounds in 1915. During the five-year period between 1925 and 1930, the average annual importation was close to 700,000 pounds.

Reopening of breweries in the United States for production of 3.2 percent beer found the world short of hops. Cultivation in Bavaria and Czechoslovakia in 1932 decreased approximately 50 percent. In addition, the growers in Bohemia had a bad year, and their stocks are all but exhausted at present.

Renewed demand for hops on a nationwide basis has resulted in sharp advances in prices. At the present writing, imported hops bring 60 cents to 65 cents per pound, according to quality and point of origin. Domestic hops, 1932 crop, bring 37 cents to 40 cents per pound, also quoted as to quality and source. Leading factors in the sale of both domestic and imported material declared that the markets in Europe and on the Pacific coast are "blocked," with holders showing reserve and with every condition pointing to a probable continuation in the advance parallel with the expansion of consumption at the plants.

Mid-Continent Petroleum Income

BALTIMORE, Apr. 11, 1933.

The Mid-Continent Petroleum Company, in its report for 1932, issued today, shows that its net loss for the year has been cut to less than one-half of the amount charged to 1931. According to its consolidated income account a final net loss of $2,081,900 for 1932 is reported after provision for depreciation and depletion, leaseholds abandoned and surrendered, and adjustments of crude oil inventory to market prices. The loss in 1931 was $4,962,411. Before deductions the company had a net income of $2,915,272, as compared with $1,606,485 in 1931. The consolidated balance sheet as of December 31 last shows total current assets of $16,250,025 and current total liabilities of $2,215,938, making net current assets or working capital $14,034,086, equivalent to $7.55 a share on the 1,857,912 shares of the outstanding capital stock. Current assets amounted to 7.3 times current liabilities. Surplus on December 31 last stood at $14,971,218.49, as against $17,032,576.70 at the close of 1931.

Interocean Oil Claims Called

Pursuant to an order issued by the United States District Court at Baltimore, creditors of the Interocean Oil Company are called on by the receiver, Joseph P. Connor, to file their claims on or before June 30 next. Individuals and corporations asserting any title to or lien against or equitable interest in any of the properties or assets now or hereafter forming a part of the receivership estate are included in the call. The order placing the Interocean company in the hands of a receiver was handed down in the Federal District court in Baltimore on March 24, on complaint of the Baltimore Trust Company.

Grace Srager, of the Chatham Petroleum Company, dealer in paraffin, this city, returned to business April 11 after an absence of five weeks caused by an appendicitis operation.

Essential Oils, Aromatic Chemicals

Easter Holidays Shorten Week in Foreign Replacement Markets -- Bois de Rose and Linaloe Show Declines at Source of Supply--Java Citronella Lower

Business was moderately active in the market for essential oils during the past week. While expansion in the total volume of sales might be doubted, it was still reported that buyers were showing a disposition to discuss future requirements and were not always aloof to the idea that raw materials at present prices are safe levels at which to cover needs in a more liberal fashion. Better feeling was noted in the market. While competition was still very keen, the volume of most sellers would be quite satisfactory were prices obtained higher than those current at present. Until a general advance in values takes place, satisfactory showing in terms of dollars and cents will be almost impossible, in the opinion of trade leaders.

Price Changes

Prices were changed during the past week as follows:—

Advanced

None.

Reduced

Citronella, Java, 3½c. per lb.

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of 100 for a normal of August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
51.1	51.2	52.5	62.1

Market news that may have developed after this report was sent to press will be found on page 2.

Communications with several of the foreign primary markets were brought to an early stop last week by the Easter holidays. This was especially true as concerned countries in the Far East and also most lands doing business on a sterling exchange basis. The holidays began on Thursday and would not end until the Tuesday after Easter.

The week developed very little in the way of price changes; a lower quotation for Java citronella oil and some changes in the outside figure in the local ranges of prices being noted. The undertone to most quotations was moderately steady, but was still subject to unsettlement by reason of the element of competition.

Outlook for the sales of oils used mainly by the bottled beverage trades has been fogged considerably by the return of beer backed by a nation-wide propaganda. During the era of near-beer, sales of soft drinks and the like increased sharply. A swing to beer along broad and national lines would unquestionably be felt by the makers of other beverages, especially those sold in bottles. A drop in consumption of such drinks would have an adverse effect on the consumption of such oils as lemon, orange and lime. The situation was receiving the close attention of importers of those oils with a view to avoiding the pitfall of oversupply on a market of narrower consumption.

Peppermint and spearmint occupied a very firm position in the primary market, while on spot they were at least fairly well maintained as to price. Demand locally was not especially active. Wormseed remained easy, and tansy as well as pennyroyal were not in overly firm position.

Essential Oils

Almond. — Sweet true almond oil was firm but the recent advance had not been extended to a late hour in the period. The absence of ample spot supplies plus a high cost for replacement goods has operated to keep the market in exceptionally strong position. Demand has been fairly good on the advance.

Anise. — While trade had routine characteristics during the past week, the movement was still up to recent levels and contributed much to the firm undertone that prevailed throughout the period. Stocks were conservative in size and the holdings were mainly in quarters not disposed to be unduly competitive in the drive for more business.

Bay. — Somewhat more generous demand prevailed for this article, especially for the higher test material. Prices were very firm in all quarters and in view of the uncertainly concerning production, sellers were not disposed to accept bids.

Bergamot. — Movement into consumption was conservative. Most of the more prominent buyers appeared to be well supplied with reserve stocks and hence the backbone of demand was the call from smaller manufacturing consumers. Pricewise, the market appeared to be quite steady here and abroad. Artificial oil failed to decline further.

Birch Tar. — Jobbing business was quiet and little but that type of demand prevailed in local circles. Stability ruled prices in all quarters, this being in keeping with the position of the article in the primary market. Offerings of shipment goods were not numerous.

Bois De Rose. — Brazilian has turned easier at last, local dealers having received offerings of replacements at lower prices. Quotations on the spot remained inside at 90c. per pound but the range was narrower, the top price being $1 per pound and representing a 10c. drop from former quotations. Cayenne oil was about steady. Demand for both varieties of oil was fairly good.

Camphor. — A steadier market position prevailed on the spot. Less tendency to shade quotations was noted. Exchange on the primary market was higher at times, thus raising the replacement cost moderately. Stocks were of ample size on spot. Demand was somewhat more active.

Cananga.—While still comparatively easy, the tendency of values on the spot was to harden at currently named prices. This was rather in line with the absence of further declines in the primary market. However, the local trade has yet to experience expansion in demand for the material.

Capsicum (Oleoresin). — Raw material weakened sharply, thus reducing the basic item in the cost to produce this oleoresin. However, as prices failed to reflect the last rise in raw material, no reductions were made during the past week. Demand was along routine lines and covered immediate needs of a fair number of important buyers.

Caraway. — Raw material has become more stable abroad, ending any thought of a sufficient decline in costs to make probable a reduction in the ing market here was moderately active and no shading of quoted prices import cost of this oil. The consum- was reported.

Cardamom.—Prices firmed up so far as the minimum figures were concerned; no tendency toward further shading was noted, although offerings at $11 per pound were still fairly ample in size. The range to $24 per pound remained, covering a wide spread in quality.

Cassia.—Soap manufacturers have yet to enter the market in a major way for new supplies of this merchandise. The unused surplus holdings cared well for all immediate requirements. The price position seemed to be fairly steady and some called the import market firmer. Demand from other consumers was quite good.

Cedarleaf.—Buyers were somewhat hesitant to close with some offerings as it was said that the range in quality of oil in this market was fairly wide. Small orders were frequent and contributed to the building of a good volume of transactions.

Cedarwood.—Seasonable demand was current and movement showed a satisfactory gain, according to some local sellers of the article. Primary market producers had firm views and were not disposed to accept bids. Their unsold stocks were not excessive in size.

Citronella.—Java oil was reduced to 43c. to 45c. per pound under the influence of a more favorable replacement market. Demand was fairly good following the movement in buyers' favor. Ceylon oil was unchanged on the spot. The long Easter holidays in the Far East brought closing of the Oriental market and led to an absence of cables. Prices last received showed no change from previous advices.

Clove.—Raw material was lowered again last week and toward the close of the period appeared to be quite unsettled and inclined to move further in favor of the manufacturing consumer. Oil was unsettled and highly competitive but prices were without further change from the basis of 65c. to 70c. per pound.

Current prices on essential oils and aromatic chemicals are given in the alphabetical list of prices beginning on page 5

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MM&R Essential Oils and Balsams for microscopic work hold an enviable reputation in the scientific field for their unvarying quality.

The products offered are guaranteed to conform with the exacting standards of research laboratories and include such products as

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Croton.—Unsettlement and weakness continued to keep values as low as $2.10 per pound with the range noted as high as $2.60 as to seller. Opportunities to sell the article were not numerous last week and absence of usual trading contributed to the lack of support given prices.

Cubeb.—The leading sellers of this article were firm in their views, indicating that the price for cubeb berries would actually warrant a somewhat higher price for the oil were it not for lack of normal demand and the presence of a deal of local competition.

Ginger.—Distilled oil was in demand mainly to cover the nearby requirements of the leading users of the article; anticipation of requirements of the more remote future was not a part business during the past week. Raw material was still easy and at prices almost record low for the article.

Hemlock.—Most sellers have taken an easier view of the market of late, but prices have not been forced lower; they were 65c. to 75c. per pound, according to seller last week. The replacement cost has become somewhat steadier.

Lavender.—Sales to the manufacturers of high quality toilet soaps have covered needs fairly well at attractive prices. Spot quotations were $1.30 to $3.50 per pound, the range covering differences in quality and test of the oil. The import market was fairly active last week, some dealers being disposed to stock somewhat more liberally.

Lemon.—Consumption of this article is expected to show moderate expansion during the weeks ahead. So far as spot prices were concerned last week, the market appeared to be steady so far as the California article was concerned. Messina oil was unchanged in price but it was intimated that some brands had sold at concessions.

Lemongrass.—The foreign and spot markets lacked change, being steady as to price but with buyers remaining aloof and sellers showing reserve. The shipment markets were closed from Thursday on and resumption of cables will not take place until tomorrow.

Lime.—Because of the return of beer backed by a nation-wide propaganda for its use as a medium to raising governmental income, the consumption of lime oil during the coming summer has become somewhat difficult to gauge. So far as prices at this time are concerned, the market is firm, absence of more than moderate stocks here and in the primary market being responsible. Some have feared that increased consumption of beer will cut that of bottled beverages.

Linaloe.—Inside prices were unchanged but the range was narrower when one prominent dealer dropped quotations to $1.50 per pound, reflecting a decline in the cost of competing oil. The minimum quotation was $1.15.

Orange.—The market was still unsettled and inclined toward weakness, though no further drop in replacement quotations was reported during the period under review. The keen competition offered by African oil in all markets throughout the world has been an influential factor in shaking the foundations of values severely. Demand was rather quiet throughout the past week, seasonable expansion having failed to develop.

Palmarosa.—Prices were quiet at the recent decline but the undertone of the market seemed to be slightly firmer in keeping with the absence of weakness in the primary market. Demand was along somewhat reduced lines and consisted mainly of jobbing needs.

Peppermint.—The primary market was very steady and that on spot lacked unsettlement in any measure. Demand during the period reviewed was hardly expansive, but the fairly good jobbing business current during recent weeks was still the principal part of transactions during the period under review. Stocks here were of moderate size.

Pimento.—Leaf oil failed to decline further in price, but the market was still lacking in support of a size sufficient to make for a firmer situation. Berry oil was steady in keeping with somewhat higher prices that have prevailed for raw material.

Spearmint.—The market was reported to be firmer in the country, but the local trade could find little change so far as demand and competition that have prevailed in the spot market for a long period of time. Replacements were in firm hands at the source of supply, but not a great deal of replacement buying was done last week.

Aromatic Chemicals

Anethol.—The stability of production costs, based on raw material at current quotations, has been reflected in prices for anethol. Stocks were ample last week, but a very fair-sized movement was noted. Competition was not overly active.

Heliotropine.—As low as $1.75 per pound and as high as $2 was quoted on spot last week. Conditions suggested that values would probably become firmer and that further reductions in quotations would be unlikely. Demand was quiet but steady.

Methyl Cinnamate.—Undertones were steadier and prices failed to develop further movement in favor of the buyer for consumption. The market was $3 to $4 per pound as to seller and product. Inquiry was fairly good.

Terpineol Acetate.—Interest in this article was somewhat more apparent and the prices were somewhat firmer in most quarters. The cost of production was said to be such as to make unlikely a movement of prices in favor of buyers.

Naval Stores

Chicago Rosin

(Continued from page 31)

to sell material. At the same time, buyers consider buying a little better procedure than for the last few weeks. The outlook appears moderately improved, with some bidding for material. Ruling prices at the close of business last night were:—B grade, $4.40 per lot of 280 pounds; G grade, $5.12½; M grade, $5.50; W. W. grade, $6.05.

Pensacola Rosin

PENSACOLA, April 8, 1933.

The rosin market had a steady tone. Receipts were light. Following is a record of the market for the week:—

	Barrels					
	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
Receipts..	181	276	123	90	129	201
Shipments.	80	250	350	100	124	44
Stocks	...8,180	8,206	7,979	7,969	7,965	8,122

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WAUWATOSA WISCONSIN

Jacksonville Rosin

JACKSONVILLE, April 13, 1933.

The rosin market was quiet, but the undertone remained firm. Following is a record of the market for the week:—

	Price per unit—Low of range quoted—					
	Fri.	Sat.	Mon.	Tues.	Wed.	Thur.
B	$1.80	$1.80	$1.85	$1.85	$1.85	$1.90
D	1.95	1.95	1.95	2.00	2.00	2.00
E	2.40	2.40	2.40	2.45	2.45	2.50
F	2.55	2.55	2.60	2.62½	2.55	2.62½
G	2.55	2.60	2.60	2.62½	2.60	2.62½
H	2.60	2.60	2.60	2.62½	2.62½	2.62½
I	2.60	2.60	2.62½	2.65	2.65	2.65
K	2.95	2.95	2.95	3.00	3.00	3.05
M	3.00	3.00	3.00	3.00	3.00	3.05
N	3.30	3.30	3.30	3.30	3.30	3.35
W. G...	3.40	3.40	3.40	3.40	3.40	3.40
W. W..	3.50	3.50	3.50	3.55	3.55	3.55
X	3.55	3.55	3.50	3.55	3.55	3.55
	Barrels					
Sales	96	910	778	847	457	570
Receipts...	716	1,292	1,108	1,254	838	1,454
Shipments.	2,655	21	2,600	5,576	13	92
Stocks—	107,511	108,782	107,290	102,968	103,793	105,155

London Rosin Prices

Quotations on American rosin in London last week were:—

	Per cwt. in barrels—			
	Common.		W.W.	
	s.	d.	s.	d.
Saturday	14	6	23	0
Monday	14	6	23	0
Tuesday	14	6	23	0
Wednesday	14	6	23	0
Thursday	14	3	22	9
*Friday	..	..	..	..

* Holiday.

Other Naval Stores

Pine Oil.—The market retained a steady tone. Trade was rather quiet, with local and other buyers interested only in comparatively small or moderate quantities as a rule.

Pitch.—Quiet conditions prevailed much of the time last week, although there were occasional inquiries. As for some time past, however, the movement consisted mainly of unimportant quantities.

Rosin Oil.—There was little change in the character of business last week. A fair inquiry was noted in some quarters, but consumers showed little disposition to anticipate. The market retained a steady tone.

Tar.—Conditions underwent little change last week, the inquiry from local and other buyers being light. Prices were steady.

Naval Stores Produced at Steam and Solvent Plants

WILMINGTON, April 13, 1933.

March production of naval stores by steam distillation and solvent treatment of wood and stocks of these products on hand March 31, according to data collected by the producers' committee, through Arthur Langmeier, of the Hercules Powder Company, secretary, were as follows:—

Production

	Rosin, 500-lb. barrels.	Turpentine, bbls. (50 Pine oil, gallons).	Gallons.
Month of March..	26,597	4,255	202,929
Total from April 1, 1932.....	355,923	58,293	2,397,716

Stocks at Plants

Total, March 31, 1933	98,615	12,387	.....
March 31, 1932....	90,540	5,835	.....
Change	+8,275	+6,552	.....

Note.—Rosin production and stocks include all grades of wood rosin.

Flaxseed, Linseed Oil, Cake, Meal

Linseed Oil

(Continued from Page 32)

the firmness of the Buenos Aires market, strength in grain and other commodities and recent inflationary legislation affecting farm products.

Linseed oil was advanced 2 points by crushers to the basis of 7.6c. per pound in car lots in barrels and 7c. per pound in tankcars. Business was said to have been closed at about 2 points under these quotations, but some crushers were not inclined to shade list prices to the extent that was recently customary, their attitude apparently being due to expectations of a further advance in seed prices sooner or later.

Business in the local market for oil did not show much snap as few buyers were inclined to abandon a conservative course in purchasing operations, but the volume of business closed for the week was apparently larger than in recent preceding weeks and sentiment in selling quarters regarding the trade outlook showed improvement.

There was a rather steady demand for cash seed in domestic markets, elevator interests being reported as the principal buyers. Receipts in terminal markets at the Northwest were moderate and the country movement was light. Backward spring weather in the Northwest recently has retarded planting and there is said to be a possibility that the advance in wheat may cause an increase in the acreage devoted that cereal at the expense of flaxseed.

Minneapolis Linseed Oil

MINNEAPOLIS, Apr. 14, 1933.

Linseed oil trade is better but not very good for this time of the year. Weather conditions have been very backward this spring and this has delayed painting over a wide area, but the situation is improving now and the paint and oil distributors are a bit more active. There has been some improvement in the demand for car and tank lots for early shipment but none for round lots to be delivered in the more distant future. Buyers placed quite a few orders right after the bank holidays and evidently have contracted for requirements, more or less. There may be more improvement in general business than expected and additional need for linseed oil and the consuming trade has no over-supply on hand.

Small lot business is much better than it has been but hardly up to normal. Buyers are putting in moderate stocks but apparently are careful not to overbuy. Painting weather is becoming more or less general and business is expected to improve rapidly for a time.

Shipping instructions on maturing contracts are more prompt now than they have been in a long time. The out movement is increasing and stocks are being worn down rapidly. Crushers may have to increase operations quicker than planned on. No announcement made locally about increase in use of presses but some outside mills will start shortly.

Quotations on carload lots f.o.b. Minneapolis, cooperage, 7.2c. per pound, tanks 6.6c. per pound, warehouse 7.6c. per pound.

Chicago Linseed Oil

CHICAGO, Apr. 14, 1933.

The linseed oil market is reflecting a slightly better feeling on the part of the sellers, who are quoting firmly and who say they anticipate higher prices soon. Buyers indicate they are a little more friendly to the purchasing side than in some time, although currently the volume of business being done is not of extremely large proportions. Sellers are not looking for bids quite so readily. Most interest is in prompt shipment. Ruling prices are:—Tankcar, 6.6c. per pound, early delivery; car lots, 7.2c.; warehouse deliveries, 7.6c.

Daily shipments of linseed oil during the week ended April 14, and in the corresponding week last year, were, in pounds:—

	1933.	1932.
Saturday	163,270	388,352
Monday	473,829	320,428
Tuesday	311,289	188,012
Wednesday	364,423	204,552
Thursday	362,178	370,004
Friday	*.....	224,165
Totals	1,674,989	1,695,513
Previous totals.....	32,611,950	34,592,728
Totals to date.....	44,286,939	36,288,241

* Holiday.

San Francisco Linseed Oil

SAN FRANCISCO, Apr. 10, 1933.

Indications in the linseed oil market last week were that buyers were having it somewhat their own way, with sellers compelled to make concessions in order to do the business. However, the volume was not considered to have been important. Tankcar and drum lots are quoted the same as last week, and are:—Tankcars, 6.9c., f.o.b. Pacific Coast; drum carlots, 7.3c. ex-mill; small drum lots, 8.1c. ex-warehouse. Meal is quoted at $24 per ton, ex-mill.

London Linseed Oil

Quotations on linseed oil in London last week were:—

	Per cwt.	
	s.	d.
Saturday	14	6
Monday	14	9
Tuesday	14	7½
Wednesday	14	6
Thursday	14	4½
*Friday	..	..

* Holiday.

Baltimore Drug Bowlers

BALTIMORE, April 12, 1933.

The work of the various teams in the Baltimore Drug Trade Bowling League picked up sharply last Monday night, with another extraordinary score hung up by the team of the Noxzema Chemical Company. This quintet, in the third inning, ran its total up to not less than 1,044, which comes close to the record for all time set by any of the contenders.

Last Monday's team totals were as follows:—

	Pins		
McCormick & Co.....	918	947	868
Bromo-Seltzer	861	831	868
Noxzema	869	872	1,044
Loewy Drug.....	830	893	854
Armstrong Cork.....	823	860	802
Kremo	733	692	782

These games leave the various teams in the following positions:—

	Games		
	Won.	Lost.	P. C.
McCormick & Co.....	32	10	.762
Noxzema	26	16	.619
Armstrong Cork.....	23	19	.548
Bromo-Seltzer	22	20	.524
Loewy Drug.....	19	23	.452
Kremo	4	38	.095

Dr. Waldemar Lindgren, head of the department of geology at Massachusetts Institute of Technology since 1912, will retire at the end of the academic year, according to an official statement. He is a native of Sweden and came to the United States in 1883, later joining the United States Geological Survey, where he rose to the position of chief geologist. He was a lecturer at the Institute while still in the Geological Survey work, and became the William Barton Rogers professor and head of the department in 1912.

Animal, Vegetable, and Fish Oils

Chinawood Oil in Fair Demand with Small Changes In Local and Coast Prices--Coconut Slightly Easier--Perilla Continues Steady--Fish Products Maintained

Quiet conditions prevailed in the market for animal, vegetable and fish oils, fats and greases last week. In certain instances a fair inquiry was noted, but as a rule purchasing was along the same narrow lines noted in recent preceding weeks, many consumers still being disinclined to purchase in advance of immediate or nearby requirements. Offerings of most products were light and changes in quotations were unimportant as a rule, with the prevailing tone steady at the close of the week.

Variations in chinawood oil quotations were confined within narrow limits last week, with the tone of domestic markets easier early in the period and steadier later on. There were reports of a beter inquiry and stocks of low priced oil in some quarters appeared to have diminished, offerings being rather light at the close of the week.

Coconut was easier here and on the Coast, quotations being shaded slightly by some sellers, though in other cases prices were maintained at previous levels, with offerings generally light late in the week. Offerings of bulk oil for shipment from abroad were also limited. There were reports of a fair inquiry, though actual business apparently did not involve important quantities. Crude corn oil was firmer in tone, in company with competing product. Perilla oil was generally held at previous levels.

Cash lard met with a fairly active inquiry from local and outside buyers, but as in recent preceding weeks, purchasing was generally limited to moderate quantities. There were reports of a better export inquiry. Offerings of stearin were light and the market was steady though quiet. Tallow continued to be quoted at previous quotations in some quarters, but there were reports to the effect that business was closed at an advance.

There was no auction of tallow in London last week. Stearic acid met with a fair demand, and the market was steady, quotations being maintained at previous levels by producers. Animal oils ruled steady with trade rather quiet. Business in fish oils lacked snap, but in the absence of any pressure of offerings prices were generally steady or firm.

Price Changes

Prices were changed during the past week as follows:—

Advanced

Lard, 15c. to 25c. per 100 lbs.
Tallow, ⅛c. per lb.

Reduced

Coconut oil, spot, ⅛c. per lb.
Pacific Coast, ⅛c. per lb.
Palm oil, Niger, ⅛c. per lb.

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
65.0	64.8	68.6	73.2

Market news that may have developed after this report was sent to press will be found on page 2.

Vegetable Oils

Chinawood.—There was more or less irregularity in domestic markets last week, although variations in quotations here and on the Coast were confined within narrow limits throughout the period, prices at the close of the week being about where they stood at the previous week-end. Early in the week the tone was slightly easier, with reports current of offerings at 4c. or a shade under that figure, Coast basis, but later on the feeling appeared to be steadier, with offerings lighter. Although conflicting reports continued to be heard regarding the volume of business closed during the week, there was apparently sufficient purchasing attracted by the low prices prevailing to bring about a decrease in spot supplies. Later in the week some sellers were inclined to hold off for a time and await further developments in the situation abroad as well as in general business and financial conditions here.

Coconut.—The tone of domestic markets was easier last week, though changes in quotations were narrow. Demand was rather slow early in the period and reports were current of offerings at 2⅝c. per pound in tankcars, Coast basis, and 3c. here, or ⅛c. per pound below the figures prevailing at the close of the previous week. Later in the period offerings from refiners, importers and dealers were light and the tone of the market appeared to be steadier. There were reports current of a fair inquiry from some consumers who were in need of fresh supplies, but actual business apparently did not involve important quantities. Offerings of bulk oil for shipment from the Far East continued to be reported as very light, with quotations nominal.

Corn.—The market for crude was quiet, with reports of a better inquiry at times, though actual transactions were apparently not of great importance, as consumers in some cases appeared to be disinclined to meet the views of sellers as to values. Owing to the recent advance in grain and the firmer position of competing product offerings were light, with sellers in some cases inclined to advance prices about ⅛c.

Olive.—Trade was along the same narrow lines noted in recent preceding weeks. There were reports of a fair inquiry for foots, but actual business apparently was limited to comparatively small or moderate quantities, many consumers still being disinclined to purchase ahead to any extent. A fair inquiry in a jobbing way was reported for denatured oil. The prevailing tone was steady in the absence of any pressure of offerings.

Palm.—The market had a fairly steady tone, although there was not much life to business. Occasional inquiries were reported, but actual transactions were generally limited to unimportant quantities. On the other hand, offerings were rather light as a rule on spot and for shipment and variations in quotations were narrow.

Peanut.—Crude was quiet in Southern markets, but the tone in most sections was reported as firm, with offerings light owing to recent strengthening developments in competing product. The inquiry was quiet, buyers being inclined to hold off for further developments.

Perilla.—Quotations here and on the Coast were generally held at the levels prevailing in the previous week in the absence of any material change in conditions ruling in the primary market, offerings from abroad being reported as light, with prices steady or firm.

Rapeseed.—Denatured oil was steady at about recently prevailing prices with demand slow and offerings light. Shipments of seed from India to the United Kingdom and the Continent from Jannary 1 to March 29 were 15,000 tons against 31,900 tons in the same time last year.

Sesame.—The market was quiet, with sellers at 8c. to 8½c. per pound for yellow and 9c. to 9½c. per pound for white.

Soybean. — Quotations were maintained at previous levels by producers, but the tone of the market was regarded as firmer by some owing to strengthening developments in competing product.

Exports of Oil Cake and Meal

Exports from New York last week were:—

	Pounds	
	Oil cake.	Oil meal.
Friday	.....	.....
Saturday	.....	.....
Monday	1,005,900	.....
Tuesday	3,334,800	.....
Totals	4,340,700	.....
Since January 1—		
This year	57,855,900	.....
Last year	75,503,650	2,353,008

Chicago Vegetable Oils

CHICAGO, April 14, 1933.

Vegetable oils appear to be in a somewhat in-between position, having shown some relapse from the early-March bulge and not yet being in any general upward swing which some expect to develop in case of commodity price improvement. Buying is still rather limited, with inquiry not very active, but around midweek there is currently a better tone, and some sellers are taking a more encouraged attitude. Coconut is quiet but steady. Corn is in limited call, on a fairly firm basis. Chinawood and soybean materials are both slow, with peanut dull.

COCONUT—Crude coconut oil is quoted at 2¾c. per pound, nominal, prompt shipment, Pacific Coast; and 2¾c. to 2⅞c., nominal, deferred shipment. Acidulated oil, basis prime, is quoted at 3¼c., prompt. Refined, edible oil is quoted at 5½c. to 6c. per pound, barrels, car lots; and 6½c., barrels, less than car lots.

CORN—Crude, low acid, is quoted at 3c. to 3⅛c. per pound, asked, outside; and the same price, Chicago, prompt. Refined, edible oil is quoted at 5½c. to 5¾c. per pound, barrels, car lots; and 6¼c., barrels, less than car lots.

CHINAWOOD—Chinawood oil is ruling around 4.3c. per pound, tankcar, Pacific Coast, partly nominal; and 5.3c., Chicago.

SOYBEAN — Domestic, prompt, tanks, Middle West mills, 3c. per pound. Refined, 4c.

PEANUT—Basis prime crude, 5c. to 5½c. per pound, prompt shipment. Edible, barrels, car lots, 8½c. to 9c.; barrels, less than car lots, 9c. to 10c.

San Francisco Vegetable Oils

SAN FRANCISCO, Apr. 10, 1933.

Vegetable oils were only finding a nominal amount of activity, and last week was the entry of at least one new low price. In not a few instances, however, there is a proven buying interest here and there, but bids and orders are placed at low limits, which sellers are endeavoring to meet, to the detriment of the market generally. While both edible and paint oil classes were lacking in strength, Chinawood appeared to be the most spectacular weakness, one sale of the latter registering below four cents during the course of the week. Coconut, while maintaining a fairly steady trend, did not appear to have any too strong an undertone, owing to the very cheap price on copra. The German embargo is generally credited as being largely responsible for the present market condition.

Ruling prices are:—

COCONUT. — Futures to December, 2¾c. per pound in tankcars, with spot and nearby available at 2⅝c. per pound, f.o.b. mills, Pacific Coast. Refined edible oil quoted at 5¾c. per pound in drums, ex warehouse.

CHINAWOOD. — Sales are reported at 3.9c. per pound, f.o.b. tankcars, Pacific Coast ports, with sellers quoting 4⅛c. nominally. Prompt and deferred shipments are available.

SOYBEAN. — Crude imported, quoted at 4⅛c. per pound in tankcars, f.o.b. Pacific Coast ports; refined Manchurian oil quoted at 5c. per pound in drums, for small lots, with crude bulk f.a.q. at 2½c. per pound, c.i.f. Pacific Coast ports in bond for prompt shipment. Domestic crude oil in tankcars quoted at 4⅛c. per pound, delivered Pacific Coast points for shipment from middle Western mills. Small lots quoted at 5¼c. per pound in drums, ex warehouses.

PEANUT. — Oriental crude is quoted at 3⅛c. per pound, c.i.f. Pacific Coast ports in bulk steamers' tanks for prompt shipment.

PERILLA. — Quoted at 4⅛c. per pound in tankcars, f.o.b. Pacific Coast ports for prompt and deferred shipment.

HEMPSEED. — Imported is qouted nominally at 4½c. per pound, in drums, duty paid, f.o.b. Pacific Coast ports; small spot lots quoted at 5¾c. per pound in drums. Domestically crushed oil in tankcars quoted at 4½c. per pound, f.o.b. mill, Pacific Coast.

RAPESEED. — Denatured refined rapeseed oil reported sold at 4.05c. per pound in tankcars, in bond, f.o.b. Pacific Coast ports. Blown rapeseed oil is quoted at 52c. per gallon of 8 pounds, delivered, San Francisco.

TEASEED. — Quoted at 5½c. per pound in drums, c.i.f. San Francisco.

SESAME. — Seed is qouted at $38.00 per ton, c.i.f. Pacific Coast ports for prompt shipment, but buyers have withdrawn their ideas to $35. Crude sesame oil is quoted at 5c. per pound in tankcars, f.o.b. San Francisco bay area mills. Meal is quoted at $25 per ton, f.o.b. San Francisco bay area mills.

VEGETABLE TALLOW. — Quoted nominally at 3⅝c. per pound, f.o.b. Pacific Coast ports.

Hankow Chinawood Oil Cable

WASHINGTON, Apr. 14, 1933.

Chinawood oil shipments from Hankow continued high and in February total exports from that port reached 13,834,000 pounds, of which 11,050,000 pounds went

Current prices on animal, vegetable, and fish oils (under Oil), fats, and greases (under Grease) are given in the alphabetical list of prices beginning on page 5

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to the United States and 2,784,000 pounds to Europe, as compared with a total of 12,502,000 pounds, 10,088,000 pounds shipped to the United States and 2,414,000 pounds to Europe in February, 1932, as made public in a report by C. C. Concannon, Chief of the Chemical Division of the Bureau of Foreign and Domestic Commerce.

At the end of February stocks of oil on hand at Hankow were estimated at 2,100 short tons. Statistics enumerated below indicate that exports from Hankow to the United States during February were considerably higher than the previous month, as well as for the corresponding month of 1932:—

	Pounds—Total.	Pounds—United States.
February, 1933	13,834,000	11,050,000
January, 1933	9,504,000	6,584,000
February, 1932	12,502,000	10,088,000
Jan.-Feb., 1933	23,338,000	17,654,000
Jan.-Feb., 1932	19,734,000	16,222,000

	To Europe, pounds.	Hankow stocks, short tons.
February, 1933	2,784,000	2,100
January, 1933	2,929,000	2,670
February, 1932	2,414,000	2,300
Jan.-Feb., 1933	5,704,000	.....
Jan.-Feb., 1932	3,512,000	.....

Copra

Domestic markets for copra were more active last week, though such transactions as were reported did not involve important quantities. Lower prices latterly prevailing stimulated buying interest to some extent, however, and sales were reported at 1.50c. per pound, Coast basis, with reports current of subsequent offerings at 1.45c. per pound.

Manila Copra Cable

WASHINGTON, April 14, 1933.

Copra market weak with Saturday closing prices one of lowest on record. Arrivals in thousand sacks:—Manila, 57.2; Cebu, 51.8. No buyers for copra cake; imposition this week of German duty of 150 shillings per ton on copra cake responsible for stagnation of copra market and causing lower prices on copra. Four mills operating. Saturday prices were as follows:—

	1933—Pesos per 100 kilos.	1933—U. S. dollars per 100 lbs.	1932—Pesos per 100 kilos.	1932—U. S. dollars per 100 lbs.
Manila	5.2@5.3	1.18@1.20	7.8	1.77
Cebu	5.2@5.3	1.18@1.20	8.1	1.83
Legaspi	5.3	1.20	7.9	1.79
Hondagua	5.1@5.2	1.16@1.18	7.9	1.79

The above information was contained in a cable to the Department of Commerce, April 8, 1933.

San Francisco Copra

SAN FRANCISCO, Apr. 10, 1933.

Copra is in an adverse position, with the plane of the market still at 1.4c. to 1.5c. per pound, c.i.f. Pacific Coast ports. Buying continues rather hesitant, although consumers appear fairly willing to keep their position a trifle long at this price. Meals are quoted as follows:—Domestic, $19 per ton, ex-mill; Japanese, April-May shipment, duty paid, $18.50, and Manila, prompt, $18.50.

Animal Oils

Degras.—The market had a steady tone, with quotations generally held at previous levels. No broadening of trade was reported, consumers being disinclined to anticipate, but a fair inquiry was noted in a jobbing way.

Lard.—Reports were current of a fair inquiry for the various grades from local and outside buyers, but purchasing was generally limited to comparatively small lots to fill current needs. The market was steady.

Neatsfoot.—There was little change in the attitude of buyers last week. A fair inquiry was noted, but as in recent preceding weeks, only moderate lots were wanted. Quotations were maintained.

Oleo.—There was not much snap to domestic business, though a fair inquiry was noted in some quarters from consumers who were in need of fresh supplies. Export trade was quiet.

Movement of Oleo Products

Oleo oil exports and oleo stock receipts at New York last week were:—

	Oleo oil. Exports. Barrels.	Oleo stock. Receipts by rail. Tierces.
Friday	....	120
Saturday	140	....
Monday	341	320
Tuesday	580	190
Wednesday	800	180
Totals	1,861	810
Since January 1:—		
This year	19,281	12,609
Last year	33,831	15,437

Chicago Animal Oils

CHICAGO, April 14, 1933.

Further dullness has been prevailing in these products recently, but the price structure is being maintained on such business as exists currently. A certain level of continuing inquiry is noted here and there, with the tone indicating some underlying firmness. The quotations are in some cases nominal, with most buyers content to stay out of actual dealings for the present.

Ruling prices are:—

DEGRAS—Common, domestic, 2¾c. to 3c. per pound; common, English, 3¾c. to 4c.; neutral, domestic, 7¼c. to 7½c.

LARD—No. 1, 6c. to 6¼c. per pound; No. 2, 5½c. to 5¾c.; extra, 6¾c. to 7c.

OLEO—No. 1, 5¾c. to 6c. per pound; No. 2, 5¼c. to 5½c.

TALLOW—Acidless, 5½c. to 5¾c.

Fish Oils

Cod.—No broadening of business was noted last week, although there were reports of a fair inquiry at times. As a rule, however, consumers showed little disposition to provide for future requirements, despite the belief that stocks in the hands of users are small. Conditions prevailing in foreign centers underwent little change, primary markets being reported as steady or firm, with shippers disinclined to offer very freely, and local quotations were generally held at former levels.

Menhaden.—There was a lack of new developments in the way of price changes in the local market for refined oil. Business was along the same conservative lines noted for some time past. Occasional inquiries were received, but purchasing was confined to comparatively small or moderate quantities. The market was steady on the basis of previous quotations. Southern markets for crude were reported as firm, with offerings light.

Whale.—The market for refined oil retained a steady tone, with quotations maintained at former levels. So far as new business was concerned there was little in the way of activity to record, consumers being disposed to limit their takings to small lots. Crude quiet and nominal.

Baltimore Fish Oils

BALTIMORE, April 12, 1933.

Sale of several tanks of menhaden fish oil by the factories down the lower Chesapeake Bay during the last week is reported. To this information is added the intelligence that the sales were on the basis of 10 cents per gallon, which seems to be the established price at this time, with perhaps some prospect that the quotation may be advanced sooner or later. The sales indicate a willingness of buyers to revise their ideas of value upward, in contrast with the previous attitude when an offer to take on a quantity of oil at 10 cents was withdrawn after failing to bring out tenders. Evidently there are producers willing to reduce their supplies of oil before the opening of the new fishing season. But of even greater significance is the seeming decision of consumers to abandon their stand against any advance, they having for some time held out even against paying 9½ cents. The feeling at the factories is accordingly improved, especially since even at the low prices of other fish products the large catches last season made the period a profitable one, leaving the various plants in a good position.

Chicago Fish Oils

CHICAGO, April 14,1933.

Fish oils continue dull and without much feature, but the buying appears sufficient to maintain a fair semblance of order and steadiness in the market. Sellers complain, however, that the available business is limited both as to aggregate volume and in size of individual orders. Some West Coast material buying is reported.

Ruling prices are:—

COD—Newfoundland, 21c. to 22c. per gallon; domestic, 21c. to 22c.

MENHADEN — Light pressed, 4c. to 4¼c. per pound.

SARDINE — Light California, Pacific Coast, 12c. to 14c. per gallon.

SALMON—Pacific Coast, 12c. to 13c. per gallon.

Pacific Coast Fish Oils

SAN FRANCISCO, April 10, 1933.

There has not been sufficient business in fish oils on the Pacific Coast lately to establish the market in them, and the matter of arriving at the correct price position is at best guesswork at this time. Divergent views of holders of stocks and brokers and potential buyers place the market price at as wide a variance as 5 cents per gallon in some instances. In any event, the weaker turn of events in other oils during the past fortnight is regarded as being sufficient enough a factor to place fish oils in a lower place than they were regarded just recently. All fishing on the Coast is stopped now, and the holdover is regarded as not being large. Estimates of northern pilchard oil stocks are roughly regarded as 50 tank-cars and a like amount of California sardine oil is thought to be possibly existant now.

Ruling nominal prices are quoted:—

SARDINE.—California sardine oil quoted nominally at 12c. per gallon, in tank-cars, f.o.b. Monterey for immediate shipment; biologically tested oil for poultry feeding is quoted at 45c. per gallon, f.o.b. San Francisco in drums.

SALMON.—Northern salmon oil quoted nominally at 12c. per gallon, f.o.b. Pacific Coast.

PILCHARD (Canadian).—Quoted nominally at 12c. per gallon, f.o.b. Seattle in bond.

HERRING.—Quoted nominally at 12c. per gallon, f.o.b. cars, Seattle.

Fats and Greases

Grease.—Quotations were generally held at previous levels, but the tone of the market appeared to be somewhat steadier, although business lacked snap, many consumers still being disinclined to purchase ahead.

Lard.—Changes in quotations on cash lard were generally moderate in the absence of wide fluctuations in the Western market for futures. Business was on a conservative scale, with the demand for moderate quantities reported as fairly active. Changes in hog quotations in the West were moderate.

Stearin.—The market presented a steady appearance, quotations being maintained at previous levels. Trade was quiet with offerings light.

Tallow.—A steadier tone developed. In some quarters 2½c. per pound continued to be quoted, but reports were current to the effect that sales were made at an advance of ¼c. per pound for extra, delivered. Offerings were generally reported as light. There was no auction in London last week.

Current prices on animal, vegetable, and fish oils (under Oil), fats, and greases (under Grease) are given in the alphabetical list of prices beginning on page 5

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Domestic Grease Receipts

Receipts at New York last week in packages:—

	Lard.	Tallow.	Grease.
Saturday	1,200	....	....
Monday	7,175	....	....
Tuesday	14,083	....	....
Wednesday	2,873	....	....
Thursday	947	....	....
*Friday	....	....	....
Totals	26,278	....	....
Since January 1:—			
This year	609,768	....	....
Last year	648,883	....	....

* Holiday.

Grease Exports

Exports of lard, stearin, tallow, and grease from New York last week were as follows:—

	Pounds—Lard.	Stearin.	Tallow.	Grease.
Friday	5,600	....	....	....
Saturday	428,960	....	....	....
Monday	859,056	63,200	....	....
Tuesday	643,490	....	....	....
Wednesday	205,975	....	....	....
Totals	2,143,081	63,200	....	....
Prev. w'k.	2,798,840	41,600	104,400	....
Last year	3,524,697	....	....	....
Since Jan. 1:—				
This y'r.	76,715,934	1,646,400	1,700,900	286,000
Last y'r.	86,652,242	618,200	....	884,000

Chicago Lard and Tallow

CHICAGO, April 14, 1933.

The cash lard market has shown some signs of reviving interest in the last few days, with trade picking up in volume here and there, and with related products firming up. Hog prices have firmed, and the shipping trade, while quiet, is in fair position, it is reported. Other commodity markets' action is aiding this one. Tallows are firm after easing slightly. Greases are quiet, but seem moderately steady. Stearins are quiet and little changed.

The range of lard quotations from the opening, Saturday, April 8, to the close, Thursday, April 13, is shown in the following tables:—

	Per 100 pounds—Open.	High.	Low.	Close.	Previous Friday.
Cash	$4.17	$4.37	$4.17	$4.37	$4.17
May	4.32	4.50	4.30	4.45	4.27
July	4.37	4.57	4.42	4.55	4.40

TALLOWS (tierces) — Edible, 3c. to 3⅛c. per pound; fancy, 2¾c. to 3c.; prime packers', 2¾c. to 3c.; No. 1 packers', 2½c. to 2⅝c.; prime renderers', 2¼c. to 2½c.; No. 1 country, 2c. to 2⅛c.; B country, 1⅞c. to 2c.

GREASES (tierces)—Pigsfoot, 3¼c. to 3½c. per pound; choice white, 2⅝c. to 2½c.; choice white, export, 3c. to 3¼c.; A white, 2½c. to 2⅝c.; B white, 2⅜c. to 2⅝c.; crackling, 1⅜c. to 2c.; garbage, 1½c. to 1¾c.; bone naphtha, 1½c. to 1⅞c.

STEARINS (barrels)—Prime oleo, 3½c. to 3¾c. per pound; lard, 3¾c. to 4c., largely nominal; A white grease, 3⅛c. to 3⅜c.; A white grease, export, 4c. to 4⅛c.; yellow grease, 3c. to 3¼c.; extra oleo stocks, 3¾c. to 4c.; No. 2 stocks, 3¼c. to 3½c. (oleo stocks in car lots).

English Lard and Tallow

Quotations per cwt. on refined American lard in Liverpool last week were as follows:—

	Spot. s. d.	May. s. d.	July. s. d.	Sept. s. d.
Saturday	38 6	35 0	36 0	36 9
Monday	38 6	34 9	35 9	36 9
Tuesday	38 6	35 0	35 9	36 9
Wednesday	39 6	36 0	36 9	37 9
Thursday	39 3	35 6	36 0	37 0
*Friday	.. ..	.. ..	.. ..	.. ..

* Friday.

London Tallow

Quotations per cwt. on tallow in London last week were as follows:—

	Choice. s. d.	Fine, good mixed. s. d.
Saturday	19 9	18 3
Monday	19 9	18 3
Tuesday	19 9	18 3
Wednesday	19 9	18 3
Thursday	19 9	17 9
*Friday	.. ..	.. ..

* Holiday.

Fatty Acids

Red Oil.—Quotations were maintained at previous levels by producers, with the tone of the market steady. There was not much snap to business, but a fair movement of moderate lots was noted.

Stearic Acid.—Raw material was firmer, but aside from this there was an absence of new developments in the situation. A fair demand was reported from local and outside buyers. Previous quotations remained in effect.

(Continued on page 57)

Cottonseed, Oil, Cake, and Meal

March Refined Oil Consumption 256,716 Barrels--Prices Advance--Crude and Other Products Remain Firm with Offerings Light -- Farm Work Backward

A development of interest in the market for cottonseed products last week was the publication of the March report from the Census Bureau. This was more bullish than had been expected by some so far as consumption was concerned, the figures being in some instances about 50,000 barrels above estimates previously current.

Refined oil futures had an upward trend in the local market and a generally firm tone prevailed in the South where a better inquiry was reported in some section for meal though business in crude oil was rather low. Offerings were reported as light in all sections, however, and sentiment in some cases appeared to be more bullish, partly as a result of the government consumption figures though it was also apparently traceable to strength in other commodities, the drift of cotton and lard, as well as grain, being upward at times.

Trading in refined oil futures here was more active. The New York Produce Exchange remained closed Friday and Saturday for the Easter holidays.

Market news that may have developed after this report was sent to press will be found on page 2.

Cottonseed, Cake, Meal

A generally firm tone was reported in Southern spot markets and in some sections the tendency was upward with sentiment among sellers apparently rather more bullish, the latter development being attributed to the recent advance in grain. The trend of the Memphis speculative market was upward at times and this also had some effect on the tone of spot markets in other sections.

In parts of the cotton belt a better inquiry was reported for meal, interest on the part of buyers in the feed trade being stimulated to some extent by the strength of other products which have been competing for some time past with cottonseed meal. The government monthly report showed that stocks of cake and meal in some cases are considerably larger than a year ago, but offerings from holders continued light.

According to official statistics, production of cake and meal during eight months of the season ended with March was 1,082,324 tons, against 1,296,814 tons in the same time last season. Stocks at the mills at the close of March were 286,197 tons, against 203,033 tons at the same time last season.

Cottonseed Oil

Trading in refined cottonseed oil futures in the local market was more active last week, with the prevailing tone firm, the trend of prices being upward in the main. Sentiment appeared to be more bullish for the time being at least, this development being attributed to strengthening developments in outside markets, notably grain, lard and cotton. Also the monthly cottonseed report from the Census Bureau was more bullish than had been expected, the indicated consumption during the month of March being about 50,000 barrels more than some in the trade had predicted. Offerings of contracts here were light much of the time, though there was liquidation on strong spots attributed to some recent buyers.

The report from the Census Bureau was received on Wednesday. It indicated that the consumption of refined oil during March was 256,716 barrels as compared with 177,808 barrels in the previous month, 220,745 barrels in the same month last year and 294,850 barrels two years ago. The visible supply showed a decrease during the past month of more than 50,000 barrels, leaving a total on March 31 in the shape of seed and crude and refined oil of equal to 2,908,500 barrels against 3,044,226 barrels in the previous month, 2,497,000 barrels in the same month last year and 1,543,439 barrels two years ago.

Receipts of seed at the mills during the period from August 1 last to March 31 this year were 4,267,956 tons against 5,298,234 tons in the same time last season; crushed 3,817,786 tons against 4,598,504 tons. Production of crude oil during eight months of the season ended with March was 1,183,784,181 pounds against 1,442,874,940 pounds in the same time last season; refined oil, 939,695,758 pounds against 1,194,427,493 pounds. Stocks of seed at the mills at the close of March amounted to 749,164 tons against 709,502 tons at the same time last season; crude oil, 161,245,721 pounds against 129,972,523 pounds; refined oil, 807,367,426 pounds against 684,257,843 pounds. Exports of crude oil during seven months of the season ended with February were 27,451,960 pounds against 9,476,572 pounds in the same time last season; refined oil, 4,601,069 pounds against 3,872,026 pounds.

Offerings of crude oil in the South were light and the prevailing tone was firm, though prices showed little change. Sales were reported at 3c. per pound in the Southeast, 2⅞c. in the Valley and 2⅝c. per pound in the Southwest. A dispatch from Memphis late in the week stated that a few sales were made there early in the week at 2⅞c. per pound, but that mills were expecting 3c. per pound later in the week and that there was little oil obtainable even at the latter figure. Receipts of live hogs in Western markets were moderate. Tallow was firmer in tone and business was reported to have been closed at an advance, though some sellers continued to quote previous prices.

Conflicting reports were received from the South concerning the progress of the new cotton crop. Memphis wired that field work was being delayed by wet weather. Correspondence from Atlanta stated that the movement of fertilizers is larger than last season and that cotton planting is progressing rapidly. The weekly government report stated that cotton planting is making about normal progress in the eastern portion of the belt, where the soil has been in rather favorable condition to work, that it is general in South Carolina and has begun in Georgia at about the average rate.

In the central portion of the cotton belt, including Alabama, Mississippi, Tennessee and Arkansas, the soil remains entirely too wet, and seeding, normally begun at this time, is delayed in most places. In the Western belt conditions are more favorable as far east as Central Arkansas. A little cotton has been planted in southern Arkansas and seeding has progressed favorably through central Texas. Planting usually begins by this date to the southern portions of North Carolina, Arkansas and Oklahoma.

Following is a record of the market for bleachable prime summer yellow cottonseed oil futures on the New York Produce Exchange for the week:—

Saturday, April 8, 1933

	Cents per lb. in tanks High.	Low.	Close.	Sales. Tanks.
April	...	...	3.80@ —	....
May	...	...	3.90@3.99	....
June	...	...	3.95@4.10	....
July	...	...	4.05@4.12	....
August	...	...	4.10@4.25	....
September	...	...	4.24@4.28	....
October	...	...	4.25@4.30	....
November	...	...	4.28@4.38	....
Total sales				....

Spot (prime Summer yellow)—3.80c.

Monday, April 10, 1933

	Cents per lb. in tanks High.	Low.	Close.	Sales. Tanks.
April	...	...	3.80@3.99	....
May	...	...	3.90@3.95	....
June	...	...	3.95@4.10	....
July	...	...	4.08@4.15	....
August	...	...	4.14@4.25	....
September	...	...	4.26@4.30	....
October	...	...	4.30@4.34	....
November	...	...	4.30@4.40	....
Total sales				*6

Spot (prime Summer yellow)—3.80c.

*Switches.

Tuesday, April 11, 1933

	Cents per lb. in tanks High.	Low.	Close.	Sales. Tanks.
April	...	...	4.00@ —	....
May	4.06	4.02	4.04@4.08	11
June	...	...	4.10@4.20	....
July	...	...	4.20@4.24	....
August	...	...	4.25@4.35	....
September	4.38	4.36	4.38@4.44	3
October	4.35	4.35	4.45@4.48	1
November	...	...	4.50@4.55	....
Total sales				*45

Spot (prime Summer yellow)—3.90c.

*Includes 30 switches.

Wednesday, April 12, 1933

	Cents per lb. in tanks High.	Low.	Close.	Sales. Tanks.
April	...	...	3.95@ —	....
May	4.08	4.06	4.01@ —	13
June	...	...	4.10@4.20	....
July	4.25	4.19	4.19@ —	22
August	...	...	4.25@4.35	....
September	...	...	4.38@4.44	....
October	4.46	4.44	4.42@4.46	10
November	4.50	4.50	4.48@4.51	5
Total sales				50

Spot (prime Summer yellow)—3.95c.

Thursday, April 13, 1933

	Cents per lb. in tanks High.	Low.	Close.	Sales. Tanks.
April	...	...	3.95@ —	....
May	4.08	4.04	4.08@ —	8
June	...	...	4.15@4.25	....
July	4.25	4.25	4.26@ —	1
August	...	...	4.29@4.39	....
September	...	...	4.41@4.45	....
October	4.47	4.47	4.42@4.48	2
November	4.55	4.55	4.55@ —	1
Total sales				12

Spot (prime Summer yellow)—3.95c.

Friday, April 14, 1933

Holiday

Atlanta Cottonseed Products

ATLANTA, April 11, 1933.

Cotton planting is progressing rapidly in the South and the movement of fertilizers, being greater than last year, indicates a larger crop in the Southeast than in 1932.

The market for cottonseed products continues steady in the Southeast without change in any item, as compared with the preceding week.

Quotations of this market are as follows:—

OIL—Prime crude, 2¾c. per pound.

MEAL—7 percent grade, $15 to $15.50 per ton, interior mill points.

HULLS—Loose, $8 to $8.25 per ton.

LINTERS—First cut, 2c. to 2½c. per pound; clean mill run, 1c. to 1¼c.; second cut, ¾c. to 1c.

Memphis Cottonseed Products

MEMPHIS, April 13, 1933.

Crude cottonseed oil was quiet throughout the week. Some scattered sales at 2⅞c. per pound, but mills are expecting three cents later in the week and not much oil is available in this section, even at three cents. Cottonseed meal somewhat more active, with $14.75 per ton quoted for 41 percent, Memphis basis, and $13.75 per ton Valley basis. Farm work being delayed by wet weather.

The trend of cottonseed and meal quotations on the Memphis exchange during the past week was as follows:—

Cottonseed Statistics: August-March

Cottonseed received at mills, crushed, and held, and cottonseed products manufactured, shipped out and held August 1 to March 31, 1933 and 1932, amounted, according to the Bureau of Census, to the following quantities:—

Cottonseed

Received, Crushed, and Held

	Tons— Received at mills* Aug. 1 to March 31. 1933.	1932.	Crushed Aug. 1 to March 31. 1933.	1932.	On hand at mills March 31. 1933.	1932.
United States	4,267,956	5,298,234	3,817,786	4,598,504	749,164	709,502
Alabama	238,459	345,539	219,658	319,233	28,895	26,975
Arizona	27,706	48,237	34,588	41,301	216	6,985
Arkansas	352,949	513,254	296,376	424,211	64,381	79,640
California	48,924	78,853	47,375	73,032	6,804	7,021
Georgia	305,705	402,951	259,483	361,204	56,399	43,126
Louisiana	170,055	242,033	155,789	230,244	16,604	12,441
Mississippi	502,243	694,674	422,665	597,810	103,875	97,945
North Carolina	225,067	241,905	205,431	216,668	24,445	26,244
Oklahoma	349,072	374,742	337,424	331,443	51,451	42,094
South Carolina	203,683	204,493	191,501	189,242	14,479	16,156
Tennessee	404,485	474,453	306,308	364,618	107,542	110,063
Texas	1,383,750	1,602,138	1,287,876	1,382,395	271,142	232,902
All other states	55,828	74,962	53,312	67,103	2,931	7,910

* Includes seed destroyed at mills but not 300,024 tons and 24,784 tons on hand August 1, nor 45,034 tons and 35,573 tons reshipped for 1933 and 1932 respectively.

Cottonseed Products

Manufactured, Shipped Out, and Held

	On hand August 1.	Produced Aug. 1 to March 31.	Shipped out Aug. 1 to March 31.	On hand March 31.
Crude oil, pounds—				
1932-1933	*29,523,581	1,183,784,181	1,085,143,493	*161,245,721
1931-1932	8,086,071	1,442,874,940	1,355,013,184	129,972,523
Refined oil, pounds—				
1932-1933	†628,420,148	‡939,695,758	.....	†807,376,426
1931-1932	277,836,530	1,194,427,493	.....	684,257,843
Cake and meal, tons—				
1932-1933	114,656	1,722,638	1,551,007	286,197
1931-1932	146,888	2,062,909	2,006,764	203,033
Hulls, tons—				
1932-1933	162,773	1,082,324	1,131,874	113,223
1931-1932	47,723	1,296,814	1,126,962	217,575
Linters, running bales—				
1932-1933	235,521	602,410	553,736	284,195
1931-1932	175,904	737,270	629,281	283,893
Hull fiber, 500-lb. bales—				
1932-1933	4,138	15,113	7,067	12,184
1931-1932	3,564	28,554	24,699	7,419
Grabbots, motes, etc., 500-lb. bales—				
1932-1933	15,250	21,461	19,072	17,639
1931-1932	12,475	25,857	17,457	20,875

* Includes 4,182,006 and 15,022,958 pounds held by refining and manufacturing establishments and 7,235,770 and 29,476,270 pounds in transit to refiners and consumers August 1, 1932, and March 31, 1933, respectively.

† Includes 4,652,177 and 6,417,185 pounds held by refiners, brokers, agents, and warehousemen at places other than refineries and manufacturing establishments, and 5,598,691 and 1,993,167 pounds in transit to manufacturers of lard substitute, oleomargarine, soap, etc., August 1, 1932, and March 31, 1933, respectively.

‡ Produced from 1,019,864,663 pounds of crude oil.

Exports for Seven Months Ended February 28

		1933.	1932.
Oil, crude	pounds	27,451,960	9,476,572
Oil, refined	pounds	4,601,069	3,872,026
Cake and meal	tons of 2,000 pounds	134,296	175,881
Linters	running bales	95,882	68,001

Cottonseed

	Per ton— Opening, April 8.	Closing, April 13.
April	$12.75@——	$13.00@——
May	13.75@15.00	13.50@15.00
June	13.75@15.50	14.00@15.50
July	14.25@16.00	14.50@16.00
August	14.75@16.50	15.00@16.50
September	15.00@17.00	15.50@17.00
October	15.00@17.00	16.00@17.50
November	15.00@17.00	16.00@17.50

Cottonseed Meal

	Per ton— Opening, April 8.	Closing, April 13.
April	$14.50@13.50	$14.40@15.00
May	14.50@14.80	14.50@——
June	14.85@15.20	14.85@15.20
July	15.40@15.75	15.30@15.50
August	15.65@16.25	15.50@15.90
September	15.85@16.50	15.85@——
October	16.00@16.50	15.95@16.25
November	16.00@17.00	16.00@16.75

New Orleans Cottonseed

NEW ORLEANS, April 12, 1933.

The market for cottonseed products was quiet, with offerings light. The market had a steady tone. Prime crude oil, 2⅞c. to 3c., nominal, per pound, f.o.b. New Orleans; prime Summer yellow, 3¾c., nominal, per pound; soap stock, 50 percent loose, ¼c. to ⅜c. per pound.

Chicago Cottonseed Oil

CHICAGO, April 14, 1933.

A certain amount of backing and filling has been reported in cottonseed oil recently, with the net result of very little actual market trend. No material volume of buying has developed, with the result that some additional material has been offered. Still, few sellers wish to commit themselves on too large a scale, lest a market pick-up of importance should develop. Price crude oil is quoted at 2¾c. to 2⅞c. per pound in the Valley and

(Continued on page 57)

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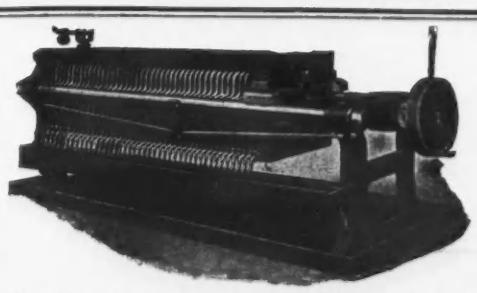

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Textile Chemicals, Dyestuffs and Tanstuffs

Sharp Curtailment in Buying by Textile and Tanning Industries--Sicilian Ground Sumac Reduced--Annatto Seed Lower -- Bichromates Quiet -- Divi-Divi Firm

A slight slowing down was evident in demand for dyestuffs and tanstuffs during the week just closed. Slackened demand could be attributed to the seasonal curtailment of production schedules in the textile and tanning industries upon the fulfillment of the Easter orders. Consumers on all sides were giving thorough consideration to inventories before coming into the market. Changes included a reduction in the prices for Sicilian ground sumac and annatto seed.

Lowering of the quotations for Sicilian ground sumac could be traced to the slowing down in the call, plus the fair amount of material now on hand here. Other tanning materials experienced a quiet week, particularly divi-divi, myrobalans and mangrove bark. In connection with mangrove bark and divi-divi prices it was said that a firm tone was in evidence because of the limited amount of material on hand here. Shoe production in the United States during February was the largest monthly total since October, 1932, according to the Department of Commerce reporting the output at 26,261,876 pairs of boots and shoes. For the first two months in the year 48,978,691 pairs were produced. Massachusetts led in production with 11,526,088 pairs, or 23.5 percent of the total output. New York produced 9,324,247 pairs, or 18.8 percent of the country's output; New Hampshire, 3,262,915 pairs, or 6.7 percent.

Fractional decline in the price for annatto seed was primarily an effort on the part of sellers to stimulate interest, for the quotation on the seed item remained unaltered. Completion of the Easter orders tended to bring about a slowing down in the production schedules of certain sections of the textile industry. Report in the cotton cloth industry indicated that orders last week were running behind production schedules. Census Bureau of Department of Commerce placed consumption of cotton, exclusive of linters, during March at 494,167 bales as against 441,663 bales in February and 488,907 bales in March, 1932. For eight months ended March 31 consumption totaled 3,747,316 bales as compared with 3,563,889 bales in the corresponding period of 1932. Cotton spindles active during March amounted to 23,429,122 as against 23,659,100 in February and 24,817,340 in March, 1932.

Demand for the corn derivatives was highly irregular, but the price section of the market held steady, although the basic product was inclined to move toward lower levels as a result of the government report which was interpreted as unfavorable. The government report on farm stocks showing 1,127,000,000 bushels, being 220,000,000 bushels above a year ago. Bichromates were quiet but prices held unchanged. Antimony salt was slow, and zinc dust was barely steady.

Price Changes

Prices were changed during the past week as follows:—

Advanced

None.

Reduced

Annatto, seed, ½c. per lb.
Sumac, Sicilian, ground, $1 per ton.

Comparative Values

Index numbers compiled from nineteen typical dyestuffs on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
141.3	141.4	141.4	143.5

Market news that may have developed after this report was sent to press will be found on page 2.

Chemicals

Alumina Chloride.—Orders reaching the market from the petroleum industry followed an irregular course, although a fair demand came from the perfumery manufacturers and sellers were quotating previous prices for the anhydrous commodity.

Antimony Salt.—This market was inclined to drag during the week, what with the textile industry giving thorough consideration to inventories before ordering supplies by reason of the sharp slackening in seasonal production schedules. Prices held unchanged.

Potash Bichromate.—Upon the replacement of month-end supplies, demand here showed a slight slowing down last week, but leading producers reported the market held decidedly firm at the prices established early in the year.

Soda Bichromate.—Mixed trend of operations in the consuming industries resulted in an irregular call here last week, but prices were well maintained. Chemical manufacturers supplied a fairly good demand. Of the January exports of 568,200 pounds, Belgium consumed 141,726 pounds; France, 22,689 pounds; United Kingdom, 118,720 pounds; Chile, 71,060 pounds, and Brazil, 67,454 pounds.

Zinc Dust.—A small decline was noted in the turnover in this market last week, with the undertone barely steady as a result of the slightly lower value noted for the basic metal.

Dyestuffs

Annatto.—The market for the seed was ½c. per pound lower at 6c. to 7c. per pound, according to quantity. Lowering of the price was due to an effort on the part of sellers to stimulate business. There was little to report in the market for the paste, with prices holding steady at 34c. to 37c. per pound, according to quantity.

Camwood Bark.—The market here continued slow again last week, but leading sellers reported prices held steady at 16c. per pound.

Cochineal.—An extremely quiet week was in evidence here, with the carmine industry and other consuming channels showing little interest in withdrawals other than for urgent wants. However, the price position of the market remained unchanged with the gray item listed at 36c. to 43c. per pound and the Teneriffe silver was quoted at 37c. to 44c. per pound, according to quantity.

Fustic.—A dull demand was recorded in this market during the week just closed, with the various divisions of the textile trade showing consideration for inventories upon the termination of seasonal operating schedules, but the crystals and sticks held unchanged.

Indigo.—Business in the natural product was slow again last week, with an occasional order from the pharmaceutical trade supplying the activity, and prices continued firm at $1.25 to $1.35 per pound. The market for the synthetic material noted a fair demand at times during the week, with a steady tone a prominent feature in the dealings.

Logwood.—This situation showed little variation from recent weeks, with an irregular call in evidence throughout the week, and while buyers on all sides were adhering to the policy of restricting withdrawals to actual production wants, sellers reported the volume business moved was encouraging and prices were without change.

Madder.—The market in this direction was dull and featureless again last week, but sellers reported the limited amount of material on hand gave the market a firm tone and prices held unaltered.

Turkey Red Oil.—Shipments here were moving out with a fair degree of consistency throughout the week, and the market for both the 50 percent and 75 percent material demonstrated a steady tone.

Sizing Materials

Albumen.—The market for the edible egg product was slow again last week, with the sellers on all sides quoting the market unchanged at 74c. to 76c. per pound, according to quantity. Cables from the primary market indicated that a steady tone was noted in the trading there.

Dextrin.—Conservative orders characterized the demand side of this market last week, with a firm tone ruling the dealings in the corn derivatives, and prices for potato dextrin displayed a steady tone, although the call was limited to small lots.

Egg Yolk.—Rising commodity prices here, coupled with steady cables from the primary market, acted as a counterbalance to the dull demand noted for the spray and granular items, and sellers reported the prices held unchanged, with the granular listed at 40c. to 42c. per pound, according to quantity.

Starch.—The market for the corn derivatives again experienced an irregular call, but prices held fairly steady, although the basic grain market was inclined to sell off last week. The government report on farm stocks showing 1,127,000,000 bushels was construed as bearish, the total being 220,000,000 above a year ago. Other sorts of starch remained unchanged from a price standpoint.

Current prices on dyestuffs, and tanstuffs are given in the alphabetical list of prices beginning on page 5

Tanning Materials

Cutch, Philippine.—There was nothing uncovered in this market that would tend to disturb the steady undertone, with consumers on all sides ordering out for immediate wants only and prices were without change.

Divi-divi.—Although a slowing down in the call was apparent last week, with the tanning trade curtailing operations, sellers reported the market remained firm, being due to the limited quantity on hand here.

Gambier.—Demand held up fairly well in this market as a whole, and prices on the common, Singapore cube and plantation items were in conformity with the schedule in effect previously. Imports at New York last week amounted to 708 cases and 200 bags.

Mangrove Bark.—Further contraction in demand was noted here, but the market maintained a firm tone because of the decidedly small surplus supply in the hands of local sellers. Prices were $24 to $25 per ton.

Myrobalans.—An easy tone was displayed in the market for the various shipments, but no change was disclosed in the open quotations for the R2 commodity, being priced at $14.25 per ton, on the quotation established in the preceding week.

Quebracho.—A tapering off in the buying was quite evident here last week, reflecting the general curtailment taking place in the tanning industry, but sellers were naming previous values on both the liquid and solid articles.

Spruce.—A spotty call was shown in this market last week, but the volume apparently was sufficient to give the market a steady tone, with prices unaltered.

Sumac.—The market for the Sicilian ground material was $1 per ton lower for shipment at $44 per ton, with the New York spot market listed at $47 per ton. Demand was irregular in the market for the extracts, but a firm tone governed the dealings, with sellers naming the quotations established in the previous week.

Valonia.—Little interest was reported in the market for the beards, with no change in quotations uncovered. And the market for the cups appeared to be marking time, but a steady tone was a prominent factor in the dealings.

Leather Chemists Will Meet in Atlantic City

The American Leather Chemists' Association will hold its thirtieth annual convention June 7, 8 and 9 in Atlantic City at the Hotel Claridge. Professor Edmund Stiasny of Darmstadt, Germany, who has been acclaimed as the recognized world leader in the science of tanning, will be the special guest and speaker at the meeting. In addition to Dr. Stiasny's address, there will be a number of important papers presented by experts on the respective subjects, and there will be the usual annual reports of the association's committees. In the last mentioned group will be an exceptionally interesting set of reports on the work of the association's research laboratory in Cincinnati.

With regard to the guest speaker for the convention it was pointed out by the association that his first notable work, dealing with the principles of the liming process in tanning, was published in 1906. In 1912 he discovered and brought out the first synthetic tannin, which he called "neradol." Since then synthetic tans have become an important material in the manufacture of both heavy and light leathers. From 1912 on he published a long series of important contributions on the principles and practice of chrome and vegetables tanning. Shortly before the outbreak of the World War he was called to the University of Leeds to succeed the late Professor H. R. Procter, who then had reached the age of retirement. Dr. Stiasny was in Vienna on his Summer vacation when war was declared, and he joined the Austrian Army. Upon the conclusion of hostilities, he became the head of the tanning school in the Technische Hochschule at Darmstadt. Dr. Stiasny has many friends among the chemists and tanners of the United States.

Textile Color Card Ass'n Elects

At the eighteenth annual business meeting of the Textile Color Card Association on April 12 at the headquarters, this city, all directors were re-elected, as follows:—President, Charles Pinnell; first vice-president, Roy E. Tilles; second vice-president, Armand Schwab; treasurer, Alfred L. Simon; W. Robert Blum, Albert L. Gifford, William Hand, Edward S. Johnson and J. Laird Schober. Margaret Hayden Rorke was re-elected secretary and managing director.

Foreign Trade Openings

Correspondence in regard to any of the following foreign trade opportunities should be addressed to the Bureau of Foreign and Domestic Commerce, Washington, or to any district or co-operative office of the bureau and not to this publication. When writing, give the number of the item:—

Castor oil:—Agency, Mexico City (3846).
Chemical products:—Agency, Caracas (3857).
Chemicals for the paper, textile, and leather industries:—Agency, Rio de Janeiro (3844).
Codliver oil—Agency, Medan, Sumatra (3908).
Codliver oil:—Purchase and agency, Medan, Sumatra (3915).
Cosmetics in bulk:—Agency, Mexico City (3845).
Drugs and pharmaceutical preparations:—Agency, Ancon, Panama (3907).
Drugs and pharmaceutical specialties:—Agency, Caracas (3857).
Drugs and cosmetic and toilet preparations raw materials:—Purchase, Barranquilla, Colombia (3845).
Glucose:—Agency, Buenos Aires (3858).
Lard:—Purchase, Madgeburg, Germany (3861).
Lard:—Purchase, Leipzig (3862).
Lard, pure:—Agency, Caracas (3857).
Lard:—Agency, Caracas (3901).
Linseed oil:—Agency, Mexico City (3846).
Lithopone and zinc white:—Agency, Mexico City (3870).
Medicines, prepared; toilet and pharmaceutical preparations, and drugs:—Purchase and agency, Medan, Sumatra (3915).
Medicines, prepared; toilet and pharmaceutical preparations, and drugs:—Agency, Medan, Sumatra (3908).
Paraffin, fully refined:—Agency, Lima (3881).
Perfumery, cosmetics; and toilet, biological and pharmaceutical preparations:—Agency, Toronto (3906).
Sodium bicarbonate, and calcium carbide:—Agency, Caracas (3901).
Stearin and glycerin:—Agency, Lima (3881).
Tartaric acid:—Agency, Buenos Aires (3904).
Toilet articles, especially detachable tooth brushes:—Agency, St. Michael, Barbadoes (3880).
Toilet soaps:—Agency, Toronto (3906).
Toilet and medicated soaps:—Agency, Medan, Sumatra (3908).
Toilet and medicated soaps:—Purchase and agency, Medan, Sumatra (3915).
Turpentine:—Agency, Buenos Aires (3843).
Zeolite, natural; for water purifiers:—Purchase, Milan (3645).
Zinc oxide, calcium carbonate, magnesium carbonate, and kaolin:—Purchase, Barranquilla, Colombia (3801).
Zinc sulphite:—Purchase, Helsingfors, Finland (3905).

Imports of coaltar dyes into British India amounted to 16,145,227 pounds, valued at $5,344,379, in 1932. This compares with 17,561,434 pounds, valued at $7,870,185, imported in 1931. American dyes were placed at a disadvantage in 1932 by the depreciation in British and Indian currencies.

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Fertilizer Materials

South Active but Weather Retards Northern Business--International Nitrogen Conference to Be Held Here April 24 -- March Tag Sales Exceed Last Year

The Southern market continued active for both mixtures and crude fertilizers, but the Northern market was handicapped by bad weather. Frozen deposits in many banks in some of the large cities as well as in rural sections continued to limit trade, but since the distribution of farm loans by the government, fertilizer trade interests are now more cheerful than for some time. Fertilizer tag sales in seventeen states for the first three months of the year showed a comfortable increase over the corresponding period of 1932. Business during the past three weeks has been good, and the prospects for sustained buying over the remainder of April and May are considered very encouraging. Were it not for the badly demoralized structure of prices for mixed goods, trade experts say that the fertilizer industry would have been able to show good profits for the first time in five years.

Price Changes

Prices were changed during the past week as follows:—

Advanced

Bone meal, 3 and 50, Chicago, $1 per ton.
Nitrogenous material, domestic, 20c. per unit.

Reduced

Bone, steamed, 1¼ and 60, Chicago, $1 per ton.

Comparative Values

Index numbers compiled from four typical fertilizer materials on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
68.7	68.7	68.7	74.5

Market news that may have developed after this report was sent to press will be found on page 2.

Only a few open price movements occurred in fertilizer crudes last week. Sulphate of ammonia tended upward during the early part of the week, but returned to its former position on a withdrawal of interest over Thursday and Friday. Buyers of sulphate were "bargain hunting." The foreign product was unavailable at several important coastal points, and if current reports that several buyers are short of their expected top-dressing requirements are true, further price strength will likely follow. Domestic nitrogenous material advanced last week, as did steamed bone meal at Chicago. The only downward movement last week occurred in steamed 1¼ and 60 bone at Chicago.

The extension of the European nitrogen cartel for another year, as reported in this column a week ago, was followed by the news last week that an international nitrogen conference will be held in New York on April 24. Representatives of Chilean, British, German and American nitrogen interests will meet here to discuss market conditions and much inquiry has been made as to whether the conference will discuss conditions in the United States market or limit its scope to world markets outside the United States. The plausibility of New York as a meeting place for the discussion of foreign markets is simple in the respect that the American nitrate of soda producers, with headquarters in New York, have been competing severely in foreign markets and the fact that the Chilean industry is under heavy financial obligations to New York bankers.

The Norris bill for the operation of the Muscle Shoals development was revived in Washington under the administration's directions, and this time was likely to pass Congress. The bill provides for a corporate board of three members and, in a lengthy and involved section on fertilizer production, authorizes the board to arrange for fertilizer production in what was broadly interpreted as an experimental way. The text of the measure, however, seems to give the "board" power to arrange for fertilizer production as they see fit, but any commercial or private tie-up with the government's fertilizer development at Muscle Shoals will not likely occur immediately.

Fertilizer tag sales for March in seventeen states were twenty-three percent greater than March a year ago, according to the National Fertilizer Association. Sales in twelve Southern states were twenty-nine percent larger, with Texas, Virginia, North and South Carolina and Georgia showing broad gains. The accompanying table shows tag sales by states for March and for the January-March period, together with comparisons for preceding years.

Ammoniates

Nitrate of Soda.—Buyers' interest was fair but the movement of stocks was handicapped by the fact that many rural banks and some of those in the larger cities were still closed. Inclement weather along the Atlantic seaboard was also a governor on trade. Nitrate sellers have not yet received much "top-dressing" business from the South. Prices continued on a firm basis with the schedule as follows:—To fertilizer manufacturers, $23.90 per ton, in bulk; $25.20 per ton in 200-pound bags; and $25.90 per ton in 100-pound bags. To fertilizer dealers, $25.80 per ton in 200-pound bags and $26.50 per ton in 100-pound bags. These prices were basis ex-vessel at the usual ports and subject to change without notice. Considerable interest was centered in a "nitrogen conference" scheduled to be held in New York on April 24. At this writing details are surrounded by secrecy but it was known that representatives of Chilean, European and United States producers will attend this meeting.

Sulphate of Ammonia. — The spot market tended toward a further stiffening of prices during the early part of the week but a less active call for supplies from Wednesday forward took some of the added strength out of the market. Current prices were the same as those prevailing a week ago with the domestic in bulk at $21.00 to $23. per ton, basis ports or ovens, depending upon the nature of competition from foreign at individual points of destination. Imported on spot or nearby was named at $21 to $22 per ton, in bulk, basis c.i.f. ports. A continued scarcity of spot foreign goods at such ports as Savannah, Baltimore, Norfolk and New York gave domestic at those points a strong appearance. Foreign for April-May shipment was offered at $20 to $20.50 per ton, c.i.f. ports, but very little interest was shown even though it was reported that many large buyers in the South were short of sulphate for the top-dressing trade.

Cyanamide. — The market held to its recent improvements in activity and quotations for the pulverized product were firm at 97½c. per unit for car lot quantities, delivered to buyers' plants.

Castor Pomace. — Southern buyers showed some interest but the local market was dull last week. Domestic sellers continued to offer at $14 per ton for carlot quantities, f.o.b. Eastern producing points.. The foreign article was firm at $16 per ton for April-May shipment from abroad, basis c.i.f. Atlantic ports.

Dried Blood.—Bad weather lessened buyers' interest in the local market and holders of stocks continued to offer at $1.80 per unit. Weather conditions were also responsible for a lack of interest in Chicago and despite rising prices for cattle and hogs, quotations for high-grade ground were easy at $1.80 per unit at Chicago and $1.70 per unit at river points. South American was not favored with much new business and the quotation of $1.85 per unit for April shipment continued.

Fish Scrap. — Re-sales of unground menhaden scrap have been made at the basis of $2 and 10c. per unit-ton and it was reported from Baltimore last week that all of the estimated production of herring scrap had been sold on a when-and-if-made basis at $2 and 10c. per unit-ton. Ground scrap continued at $31 per ton at Baltimore.

Hoof Meal. — Some suppliers report the Chicago market at 90c. to 95c. per unit while others quote $1 as the market. Foreign continued firm at $1.40 to $1.50 per unit for shipment from abroad.

Nitrogenous Material. — Domestic moved upward last week and after a sale at Norfolk at the basis of $1.65 per unit, sellers quoted $1.70 to $1.75 per unit, f.o.b. producing points. Foreign continued at $1.50 to $1.60 per unit, basis c.i.f. Atlantic ports.

Tankage.—The local market was quiet but steady last week with ground offered at $1.75 and 10c. per unit-ton and unground at $1.65 and 10c. per unit-ton. Feeding grades in Chicago remained at $2 and 10c. per unit-ton while the fertilizer grades were still quoted around $1.10 and 10c. per unit-ton. Imported was unchanged at $1.85 and 10c. per unit-ton.

Urea.—Quotations to manufacturers continued unchanged at $82.60 per ton basis ex-vessel at Atlantic and Gulf ports. Takings by buyers have been broadening and the current position of the market was reported as being fairly active.

Potashes

Spot interest in potashes was small although the market was not without improved demands here and there. Reports from the South indicate that resale material was not being offered as freely as formerly. As reported previously the attention of the trade was centered upon the probable position of prices for the new season; Current base prices and discounts expire at the end of the month. There are no discounts now offered for imported materials and the only discounts available for spot shipment are 4½ percent on California muriate and 5½ percent on muriate and manure salts from New Mexico.

Phosphates

Price movements in the Western bone market were irregular last week. After advancing a week ago, steamed 1¼ and 60 bone declined last week. The price for domestic 3 and 50 meal, however, continued upward. Bone products were featured with a fair activity. Superphosphate continued soft while phosphate rock was wholly without new or important developments.

Superphosphate.—The market was easy at the basis of $6 to $6.50 per ton for the run of the pile and $6.50 to $7 per ton for screened and milled stocks, both in bulk, basis Baltimore. According to the National Fertilizer Association statistics, February production was 9 percent less than February last year while shipments decreased 23 percent and stocks on hand were 20 percent lower than the corresponding month of 1932.

Bone Materials.—Quotations for steamed 1¼ and 60 bone at Chicago were off $1 per ton last week, returning to their position of a fortnight ago at $16 to $18 per ton. That movement was the only weakening in the bone market over the past few weeks. Chicago sellers of 3 and 50 meal effected another advance of $1 per ton in their prices last week, quoting $18 to $19 per ton. Imported bones were steady but were not advanced in line with the recent rises in the domestic.

Phosphate Rock.—The sellers continued to report the market as rather quiet. Quotations for both the land pebble and high-grade hard rocks continued according to schedule.

Sulphur and Pyrites

April business to date compared favorably with March which in turn was slightly better than February shipments both in domestic and exports fields, according to representative suppliers. Buyers, of course, continued to operate close to their immediate and actual needs. The price situation was undisturbed with $18 per long ton still quoted at the mines.

Atlanta Fertilizer Materials

ATLANTA, Apr. 12, 1933.

The movement of manufactured fertilizers is reported active with prospects of greater usage than last year. In spite of this showing, the trade in mixed goods is reported badly demoralized. Rapid trading for late production of mixed goods is reported in fertilizer material circles. Sulphate of ammonia varies in price in different sections. Shipments of this material by boat downstream from Chicago and West Virginia points brought about an upset in that territory which is reported clearing up as the stock is cleaned up. Trading at Gulf ports is $22 per ton, while at South Atlantic ports it is still obtainable at $21.50 per ton.

Organic ammoniates are showing greater strength, and advances in prices are reported. Trading in these materials in the south is now light. Active trading in nitrate of soda is reported on a firm price basis. Potash is reported enjoying an active demand with some of its forms scarce. Very little reselling of potash is reported.

Quotations of this market are as follows:—

SUPERPHOSPHATE.—$10.10 per ton, interior basis.

NITRATE OF SODA.—Bulk to manufacturers, port basis, $23.90 per ton.

SULPHATE OF AMMONIA.—$21.50 to $22 per ton, port basis.

COTTONSEED MEAL. — 7 percent grade, $15 to $15.50 per ton, interior mill points.

NITROGENOUS.—$1.70 to $1.75 unit ammonia, ports.

TANKAGE.—Foreign ports, $1.90 to $2 and 10c. per unit.

CYANIMID.—97½c. per unit delivered to manufacturers.

SYNTHETIC AMMONIATES.—At importers' schedule.

POTASH.—At schedules.

Baltimore Fertilizer Materials

BALTIMORE, Apr. 12, 1933.

Shipments of fertilizer mixtures continued on a modest scale, what with the banking situation still constituting a positive handicap. The market for crude supplies reflects greater quiet than might be expected but notwithstanding the drawbacks encountered there are signs of strength, with certain items well maintained and others stiffened. The current quotations are about as follows:—

FISH SCRAP.—Resales of this organic ammoniate have been made on the basis of $27 per ton Baltimore, which figures out around $2 and 10c. per unit-ton. The expected yield of herring scrap has been virtually disposed of at $2 and 10c. per unit-ton, with an anticipated production of approximately 500 tons. The herring catch so far has been small.

TANKAGE.—This item remains fairly steady at $2.25 and 10c. c.a.f. basis Baltimore; for ground with unground, around $2 and 10c.

BLOOD.—The ideas of sellers reflect firmness around $2 per unit-ton.

SUPERPHOSPHATE. — Figures named are $6.50 per ton for run of pile and $7 per ton for 16 percent milled and screened stocks with shading reported.

GARBAGE TANKAGE.—Quotations of $2 10c. and 70c. per unit-ton were still named.

NITROGENOUS MATERIAL. — The tendency seems upward, with $1.75 per unit asked for domestic.

SULPHATE OF AMMONIA.—This material is stated to be in a position at the present time where it might take a sudden spurt, with considerable interest shown by potential buyers and with stocks not large. For the present a price around $21.50 per ton is quoted.

BONE.—May and June shipments from abroad were held at $17.50 for 3 and 50 ground steamed per ton with spot 4½ and 50 ground raw at $21.50 or more.

Chicago Fertilizer Materials

CHICAGO, Apr. 12, 1933.

Although demand for certain materials, such as blood, seems less active and while this product is available at slightly easier prices in some quarters, in general the fertilizer division materials are holding up well in price and displaying a generally firm tone. Buying, while not very extensive, appears adequate for keeping the market generally in fairly firm tone. Inquiries are coming in fairly well at this time. Tankage is slow. Bone materials are not very active but are maintaining their market positions in good shape.

Ruling prices are:—

BLOOD.—High grade, ground and unground, $1.70 to $1.80 per unit of ammonia; unground, suitable for feeding, 10 to 12 percent, extra good, $1.75 to $1.85 and 10; 7 to 9 percent, $1.80 to $1.90 and 10.

TANKAGE.—High grade, ground, $1 and 10; lower grade tankage, 90c. to $1; unground bone tankage, $11 to $13 per ton, Middle West; liquid stick, 80c. to 85c., nominal; hoof meal, 90c. to 95c. per unit.

BONE MATERIALS.—Ground, steamed bone, 1¼ percent ammonia and 60 percent phosphate, $16 to $18; 3 and 50, $18 to $19; 4¼ and 50, $20 to $21; raw bone meal for feeding, $25 to $26, nominal; cattle jaws, skulls and knuckles, $18 to $19; grinding hoofs, pigs' toes and waste horn materials, $15; junk and hotel kitchen bones, $10 to $12, nominal; pork cracklings, soft pressed, $17.50 to $22.50; beef cracklings, soft pressed, $15 to $17.50, nominal; hard pressed cracklings, per unit of protein, 47½c. to 50c.

(Continued on page 57)

Fertilizer Tag Sales: March

	Equivalent tons*							
	March				January-March			
South—	P.C. of 1932.	1933.	1932.	1931.	P.C. of 1932.	1933.	1932.	1931.
Virginia	155	57,651	37,088	56,467	108	124,019	114,335	179,303
North Carolina	145	199,060	136,883	314,432	130	338,876	261,424	537,815
South Carolina†	127	208,437	163,819	258,289	120	288,675	241,198	357,469
Georgia	134	206,303	153,515	343,612	118	248,398	210,032	514,667
Florida†	86	19,609	22,842	44,786	86	105,514	123,317	154,768
Alabama	112	76,600	68,600	165,359	110	108,750	99,250	239,000
Mississippi	77	20,120	25,967	79,175	80	34,995	43,900	111,425
Tennessee†	101	12,041	11,954	23,719	101	21,493	21,326	43,681
Arkansas‡	119	3,675	3,100	14,685	88	8,475	9,600	31,796
Louisiana†	102	11,667	11,470	29,345	96	23,017	23,854	60,523
Texas	177	7,347	4,148	14,137	91	20,152	22,218	50,522
Oklahoma	29	75	260	815	68	1,825	2,670	6,559
Totals, South	129	822,485	639,646	1,344,812	113	1,324,189	1,173,124	2,287,528
Midwest—								
Indiana	70	10,919	15,537	31,734	73	16,213	22,137	59,390
Illinois	29	1,489	5,081	4,360	44	3,260	7,326	12,771
Kentucky	36	7,837	21,658	20,023	62	19,949	32,355	48,038
Missouri	47	2,290	4,847	8,561	43	4,689	10,860	21,944
Kansas	34	63	185	940	14	173	1,265	1,316
Totals, Midwest	48	22,598	47,308	65,618	60	44,284	73,943	143,459
Grand totals	123	845,083	686,954	1,410,430	110	1,368,473	1,247,067	2,430,987

* Monthly records of fertilizer tags are kept by State control officials and are slightly larger or smaller than the actual sales of fertilizer. The figures indicate the equivalent number of short tons of fertilizer represented by the tax tags purchased and required by law to be attached to each bag of fertilizer sold in the various States.

† Cottonseed meal sold as fertilizer included.

‡ Excludes 19,210 tons of cottonseed meal for January-March combined, but no separation is available for the amount of meal used as fertilizer from that used as feed.

Current prices on fertilizer materials are given in the alphabetical list of prices beginning on page 5

Petroleum Solvents, Lubricants, Fuels

Some Weakness Appears in Stoddard Solvent and V. M. & P. Naphthas at Group 3--Crude Oil Situation Muddled -- Export Gasoline Prices Fall at Gulf

Quoted prices for petroleum solvents and naphthas were kept at the levels established several weeks ago, but some signs of weakness were noted in the Midcontinent market last week. Notwithstanding a growing seasonal demand on behalf of paint and varnish manufacturers, rather liberal concessions were offered by at least one Group 3 seller of v.m.&p. naphthas. Stoddard solvent was also shaded. Light cleaners' naphthas, rubber solvents and others in that group of close-cut naphthas were apparently steady. The East Coast market for solvents and diluents was also steady both in tankcar and tankwagon divisions. Other petroleum raw materials for industry passed the week in rather routine fashion. The liquefied petroleum gases displayed usual serenity while waxes, white mineral oils and petrolatums were without important changes in general aspect. Kerosene for insecticide manufacture was routine.

Legislative measures designed to adjust the muddled crude oil situation have not immediately altered the picture in the Southwest. There were reports current last week that East Texas crude was offered at the ridiculously low price of five cents a barrel. Naturally this price was for "hot" or "stolen" oil. Both Texas and Oklahoma authorities drafted laws last week to tax oil production. In Oklahoma, Governor Murray signed a bill to levy a tax of one-eighth cent per barrel on all oil produced in the State, the proceeds of which will be used for the enforcement of the new proration law. In Texas, it is proposed to tax oil at a graduated scale of two to twenty cents per barrel.

Export gasoline prices declined at the Gulf last week, marking the first movement in export prices for some time. There was considerable gossip in the local bulk gasoline market regarding a rise in prices, but the demoralized retail situation throughout New Jersey in company with inclement weather and the crude situation in the Southwest, last week's discussions were not very favorably supported.

The daily average production of crude oil in the United States for the week ended April 8 was 2,221,350 barrels, a decrease of 18,400 barrels from the 2,239,750 barrel average in the preceding week according to the estimates of the American Petroleum Institute. The daily average for four weeks ended April 8 was 2,209,300 barrels and the average at this time a year ago was 2,226,500 barrels. Runs of foreign and domestic crude to stills during the week ended April 8 averaged 2,013,000 barrels for 57 percent of refinery operation, compared with 2,121,000 barrels for 60 percent of operation during the preciding week, according to the data gathered by the American Petroleum Institute from companies controlling 91.6 percent of the nation's output.

Solvents and Diluents

Although leading Group 3 refiners of petroleum solvents and naphthas for industry have not altered their prices for tankcar quantities, signs of weakness have appeared in the price structure. This condition was particularly noted in the prices for Stoddard solvent and v.m.& p. naphthas, both of which were subject to rather liberal concessions in at least one direction. Solvents in the East Coast refinery market were unchangend and no adjustments have been reported in tankwagon prices here or in the mid-west. Purchasing of petroleum solvents continued light, although contract takings by the paint and varnish industry continued to show seasonal growth.

Cleaners' Naphthas.—The Group 3 refiners continued to quote the market for tankcar quantities at 5¼c. to 6¼c. per gallon, basis Group 3, and depending upon the specifications desired. There was not a very active call last week, although the demand was evidently sufficient to hold the prices evenly.

Lacquer Diluents.—Open market business continued light and the major portion of last week's activity was against contract. The price situation at Group 3 was unchanged, with 6½c. to 7½c. per gallon quoted for tankcar lots, according to specifications wanted.

Petroleum Thinners.—A faster call was reported in some channels of consumption, but generally the market was quiet. Quotations for tankcar lots continued unchanged at the levels established several weeks ago, which were based at 4c. to 5¼c. per gallon for tankcars at Group 3, according to specifications. The East Coast tankcar price was 8½c. per gallon, basis refinery.

Rubber Solvents.—A routine movement against contracts supplies the activity in the market for these solvents last week. The price situation continued without change at the basis of 5¼c. per gallon for tankcar quantities, f.o.b. Group 3 refineries.

Stoddard Solvent.—Leading Group 3 sellers continued to quote the market at 4¾c. to 5c. per gallon for tankcars, but there were reports of shading last week. The demand side of the market was mildly active, chiefly against contract. The local market was unchanged, witht 8½c. per gallon named for tankcars at refineries.

V. M. & P. Naphthas.—These solvents were also reported to have been subject to shading at Group 3 last week, although leading refiners continued to quote at 5c. to 7c. per gallon for tankcars, according to specifications. The East Coast bulk market continued unchanged at 8½c. per gallon, basis refinery.

Hydrocarbon Gases

The market for the group of liquefied petroleum gases was lacking in developments of a new or important nature. The movement of supplies toward regular consuming outlets was quite routine, while the price situation was held in a characteristically even place. Conditions in the general petroleum field seem to have little influence against the prices for these commodities, which have been in a very stabilized position for several months.

Butanes.—The general tenor of the market was unchanged from a week ago. Shipments to the regular users were moderate in quantity, while the prices remained at their long-established level of 2¾c. to 4c. per gallon for tankcar quantities of the 16-34-degree ether, f.o.b. Group 3.

Heptanes.—Group 3 producers continued to quote the schedule of 10c. per gallon for the normal industrial grade and 11c. per gallon for mixed, both in tankcars at Group 3, with the usual differentials for smaller quantities.

Hexane.—In company with other liquefied petroleum gases, this commodity occupied a serene position at the basis of 11c. per gallon for tankcar lots. Drum cars were quoted at 13c. per gallon and smaller lots at 14c. per gallon. The laboratory grade in drum cars was named at 17c. per gallon, basis Group 3.

Octanes.—Neither the price nor the position of this mixture has been changed. Demand continued routine and the quotations named by Group 3 producers were held at the schedule which was based at 11c. per gallon for tankcars, f.o.b. Group 3.

Pentanes.—Quotations continued steady throughout the period under review while the demand side of the market did not display anything of an unusual nature. The basic price for tankcar quantities continued at 7c. per gallon, f.o.b. Group 3.

Petroleum Ethers.—Demand from regular consumers continued close to their actual and immediate needs while the structure of prices was without a change. Producers in Group 3 quoted the 30-60 degree ether at 10c. per gallon in tankcars and the 40-75 degree product was priced at 11c. per gallon, both f.o.b. Group 3.

Propane.—The industrial demand continued at a small rate but the lack of buying activity has not altered the price situation to any visable extent. The producers continued to quote tankcars at 7c. per gallon, at refineries.

Petrolatums and Waxes

White Mineral Oils.—The market passed through last week in very quiet fashion. Regular buyers continued to limit their orders to their actual and immediate needs and most of the current movement out of selling hands was constituted by orders for one or two drums at a time. The prices for both Russian and domestic oils were unchanged.

Paraffin Waxes.—Export inquiry continued light last week but domestic buyers were more attentive than a week ago. Actual business in both the export and domestic channels was about even with a week ago, according to representative sellers. Scale wax held evenly with white named at 1.95c. to 2c. per pound, and yellow at 1.90c. to 1.95c. per pound. The 125-127 A.m.p. grade for export held at 2¾c. to 2⅞c. per pound, basis f.a.s. New York, while 2⅝c. per pound was said to have been done out of New Orleans. A similar condition was reported in the 128-130 grade for export which was quoted at 3c. to 3¼c. per pound, f.a.s. New York, and which was reported sold at 2⅞c. per pound at New Orleans. The Bureau of Mines report on stocks on hand at the end of February which showed 147,849,000 pounds was the lowest since 1929.

Petrolatum.—The regular buying trades continued to operate very lightly and limited their demands to actual needs. Business during April to date has been quite small. Competition continued among sellers and shading was still reported on quantity business, particularly on the white grades.

Fuels and Lubricants

The principal developments in the refined oils' market last week was a decline which took place in the export gasoline prices at the Gulf. A fractional mark-down in quotations was the first movement to occur in export gasoline for some months. The local bulk gasoline market was unchanged last week. There was considerable discussion regarding a possible increase in tankcar prices but there seems to be too many obstacles in the way of a rise. The retail situation in New Jersey is still in a badly upset condition and together with the muddled crude situation and the adversity of the weather ,the talk for higher price was lacking in basic support. Bunker oil was rapidly gaining strength and an early advance in prices would not be surprising. Kerosene was easy and export prices at the Gulf declined with the movement in gasoline.

Petroleum Production—Motor Fuel Stocks

	Barrels	
	1933 Jan. 1-Apr. 15	1932 Jan. 1-Apr. 15
Commercial crude oil production	220,887,000	229,146,500
	Week ended Apr. 15, 1933	Week ended Apr. 16, 1932
Daily average production	2,218,200	2,217,500
	Week ended Apr. 8, 1933	Week ended Apr. 1, 1933
Motor fuel stocks total	58,440,000	59,104,000
Motor fuel stocks at refineries	39,820,000	40,668,000

The State of the Petroleum Market

There were no changes in crude oil prices last week. U. S. motor gasoline at leading refinery centers was unchanged. Tankwagon prices were also reported unchanged.

	Apr. 14	Apr. 7	Last Year
Crude petroleum prices at well (average for ten fields), per barrel	$0.638	$0.638	$0.956
Gasoline prices at refinery (average at four refining centers), per gallon	.0334375	.0334375	.048125
Gasoline prices at service stations (average for ten marketing centers—including tax), per gallon	.1649	.1649	.1664

Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 5

OIL FUEL

EFFICIENT - CLEAN - ECONOMICAL

Oil Fuel for Motor Ships' and / or Steamers' bunkers and / or Industrial Purposes is available at the following ports through The Asiatic Petroleum Company, Limited.

Aberdeen
Adelaide
Aden
*Alexandria
*Amsterdam
Antofagasta
*Antwerp
Androssan
Aruba
*Auckland
*Avonmouth
*Balboa (Panama Canal)
*Balik Papan
Baltimore
*Bangkok
*Barton (Manchester Ship Canal)
*Batavia
*Bergen
*Bombay
*Bordeaux
*Brisbane
*Buenos Aires
*Calcutta
*Capetown
*Cebu
Cochin
*Colombo
*Colon (Panama Canal)
*Constanza
*Copenhagen
Corpus Christie
*Curacao
*Dakar
*Dover
*Durban
Fall River
Falmouth
*Fredericia
Fremantle
Galveston
*Genoa
*Gibraltar
*Glasgow
*Gothenburg
*Hamburg
Hankow
*Havana
*Havre
*Hongkong
*Honolulu
Houston
*Hull
Ichang
*Hollo
*Iquique
Jacksonville
*Jarrow-on-Tyne
*Karachi
Kingston
*Kobe
Kyle of Lochalsh
*Las Palmas
*Leghorn
*Lisbon
*Liverpool
*London (Shell Haven and Thames Haven)
*Macassar
*Madras
*Malta
*Manila
*Marseilles
*Melbourne
Minatitlan
Miri
Mobile
Mombasa
*Montevideo
*Montreal
Nagasaki
*Naples
*New Orleans
*New York
Nomi
*Oslo
*Palermo
Panama Canal (Colon, Balboa)
Pangkalan Berandan
*Penang
Perim
Pernambuco
Philadelphia
*Piraeus
Pladjoe (Palembang)
*Portland (Oregon)
*Port Said
Port Sudan
Quebec
*Rio de Janeiro
*Rotterdam
*Rouen
Sabang
*Saigon
*St. Nazaire
St. Vincent
Saltozaki
*San Francisco
*San Juan (Porto Rico)
*San Pedro (Los Angeles Harbour)
Santos
Savannah
*Seattle (Washington)
*Shanghai
Shimonoseki (Hikoshima)
*Singapore (Pulc Bukem)
*Singapore (Palce Samboe)
*Singapore (Tanjong Pagar)
Smith's Bluff
*Sourabaya
*Southampton
*Stanlow
*Stockholm
*Suez
*Sydney
Tampa (Florida)
*Tampico
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Market Conditions

Gasoline. — Conditions surrounding the local bulk market were not visably changed last week. There was still considerable gossip regarding a possible increase in the tankcar prices but weather conditions worked against the market last week and furthermore the retail price structure throughout New Jersey was still in a demoralized state. These factors in company with the muddled crude situation have held the market at its low point of 4¾c. per gallon for tankcars of U. S. motor, below 65 octane, and 5c. per gallon for trade-marked gasoline, both basis refinery. Export gasoline prices declined fractionally at the Gulf last week, marking the first movement in export prices in some time. Current export quotations are:—U. S. motor, 3⅜c.; 60-62,400 e.p., 3½c. per gallon; 60-62,390 e.p., 3⅝c. per gallon; and 64-66,375 e.p., 3¾c. per gallon.

Kerosene.—Demand picked up here and there but did not alter the price situation. The refiners continued to quote the 41-43 water white product at 5¼c. per gallon in tankcar lots, basis refinery. Quotations for tankcars at Pennsylvania refineries continued unchanged at 4½c. to 4¾c. per gallon for both the 45 and 46 water white products. The export market at the U. S. Gulf was off ⅜c. per gallon in company with the decline in export gasoline prices. Gulf exporters quoted 3⅝c. per gallon for prime white and 3⅞c. per gallon for water white.

Fuel & Gas Oils.—The bunker oil market continued to show firmness and demands have improved under the strengthening tone of the market. There is considerable talk regarding an early increase in prices above their present level of 75c. per barrel for C grade oil at the terminals. Diesel oil was also firm at the basis of $1.65 per barrel.

Lubricating Oils.—The Pennsylvania bulk market remained dull and featureless. Inquiries for both export and domestic trade were few and actual trades were also limited in number. The prices for bright stocks, cylinder oils and neutrals continued unchanged from the more or less nominal prices that have been in force for the past few weeks. The movement of lubricating oils through this market last week, by days, was as follows:—

	Gallons.
Friday	8,250
Saturday	———
Monday	81,750
Tuesday	46,150
Wednesday	94,900
Thursday	———
Total	231,050

Tulsa Petroleum Products

TULSA, Apr. 12, 1933.

The approach of spring in the Middle West has brought an increased demand for kerosene and that commodity was the most active in the Midcontinent list the past week. The buying by refiners two or three weeks ago has been followed by consistent demand from the jobbing trade, but material was increasingly scarcer for prompt shipment while demand from the retail trade apparently continued to gain. The result was a comparatively tight market, although prices as yet had not shown much tendency to advance. The better grades of kerosene for incubator use were extremely scarce.

Distillate was not far behind kerosene in activity, much to the surprise of many refiners. There was an increased amount of buying following the reduction in freight rates, after a period of light buying just before the rates were reduced. Some refiners had been lulled, apparently, into the belief that distillate season was about at an end, and had accordingly reduced their cut of this material. The new buying caught some of them short and the better grades have been extremely scarce. In some quarters the buying prices to resellers had been advanced but no change had been made in the general list to jobbers. Distillate stocks were reported at unusually low mark at refineries.

There was little of interest in the gasoline market. The continued uncertainty in the crude structure kept buyers out of the market except for their day-to-day requirements. There was no tendency on the part of buyers with storage to stock up at present even at the present low prices.

While the East Texas and Oklahoma City oil fields had been shut down there still was apparently enough cheap crude from those areas, already in storage, to keep many of the larger plants running, and there was a feeling among the trade generally that when the East Texas field, especially, is reopened the allowable will be at such a figure that crude will be easily obtainable.

The congestion of crude oil moved in tankcars to the Gulf coast apparently has been cleared up, although there were reports that in the "clearing up" prices paid for the oil were ridicuously low.

Natural gasolines marked time as demand fluctuated. Refiners were spasmodic buyers but not in large quantities and jobbers were less active in the market.

Gas oil was freely offered in several districts and prices were lower. This was true especially of the zero grades which were not in good demand as they had been earlier in the year.

Ruling prices in the Midcontinent area, basis group, Oklahoma excluding the 1c. Federal tax on gasoline, are approximately as follows:—

REFINERY GASOLINE.— Low octane, 3rd grade U. S. Motor gasoline, 2c. to 2¼c. a gallon; middle octane, 2⅛c. to 2⅜c.; high octane, 2½c. to 2⅝c.; 60-62, 400 e. p., 2⅛c. to 2⅜c.; 64-66, 390 e. p., 2¼c. to 2½c.; 64-66, 375 e. p., 2½c. to 2¾c.; 68-70, 350 e. p., 2⅝c. to 2⅞c.

NATURAL GASOLINES.—14-15 pound vapor pressure, 2⅜c. to 3c. a gallon; 16-18 pound vapor, 2¼c. to 2½c.; 22-24 pound vapor, 2c. to 2¼c.; 26-70 grade, 1¼c. to 1⅜c.

KEROSENES.—The 41-43 gravity, water white, 2¼c. to 2⅜c. a gallon; 42-44 gravity, 2⅜c. to 2½c.; 44-46 gravity, 2⅞c. to 3c.

DISTILLATES. — Prime white color, 38-40 gravity, zero, good odor, with 175 flash, 600 e. p., 1¾c. to 2c. a gallon; 38-40 gravity, light straw, zero, good odor, 175 flash, 600 e. p., 1⅝c. to 1¾c.; 36-38 gravity, light straw, 1½c. to 1⅝c.

GAS OILS.—Light straw, 34-36 gravity, zero, good odor, flash under 190, 1½c. to 1¾c. a gallon, 32-36 gravity, light straw, 40-50 cold test, ⅞c. to 1⅛c.; 32-36 gravity, dark, high cold test ugi, ¾c. to 1c.

FUEL OILS.—High cold test, 18-22 gravity, industrial fuel, no other specifications guaranteed, 22½c. to 27½c. a barrel; 18-22 gravity, bero to 10 cold test, 40c. to 45c.; 22-24 gravity, zero to 25 cold test, 40c. to 45c.; 24-26 gravity, zero to 15 cold test, 45c. to 50c.; 28-30 gravity, zero, 100 at 100 viscosity, 65c. to 70c.; 28-30 gravity, 165 at 100 crude fuel, 60c. to 65c.

BRIGHT STOCK.—Low cold test, 140-150 viscosity, D, 12c. to 12¼c. a gallon; high cold test, 11½c. to 11¾c.

Chicago Petroleum Products

CHICAGO, Apr. 13, 1933.

While waiting for the unsettled crude oil situation to straighten itself out, the gasoline market is easy and is being unfavorably affected by the recent over-production of crude in the southwest. Jobbers are not buying much new material in the outside market, preferring to stick to their contracts for the major parts of their needs. Moreover, some jobbers are still at a disadvantage by reason of failure of their interior banks to reopen.

Gasoline consumption itself appears to be running along at levels which must be considered comparatively good. Weather has been fairly favorable. Even in rural territories hard hit by general economic conditions, retail demand is fair. Tankwagon and service station price cutting is still a factor to be reckoned with, but major companies are trying to ignore much of this. High gravity gasolines are quiet. More and more attention is being given to high compression motor fuels. Natural gasolines remain easy.

Kerosene continues firm and the best product in tone in the list. Supplies are limited and country jobbers are doing a good business. Tractors are in good use in the fields, despite talk of their replacement by horses and mules. Some distillate is being used for kerosene. The gas oils are firm, but industrial products are quiet and easy. Lubricating oils are dull, bright stocks weak. Solvents and naphthas are slow.

Ruling prices in tankcar lots except as noted are:—

GASOLINE.—50-52, 450 (naphtha), 2c. to 2¼c. per gallon; low octane motor, 1⅞c. to 2⅛c.; middle octane motor, 2⅛c. to 2⅜c.; high octane motor, 2⅜c. to 2⅝c.; 60-62, 400, 2c. to 2¼c.; 64-66, 390, 2¼c. to 2½c.; 64-66, 375, 2⅜c. to 2½c.; 68-70, 360, 2⅝c. to 2⅞c.

SOLVENTS AND NAPHTHAS (all tankcar prices f.o.b. nearby refineries).—Cleaners' naphtha, 9c. per gallon, tankcar; 13c., tankwagon; petroleum spirits, 7c., tankcar; 11.7c., tankwagon; lacquer diluents, 12.2c.; rubber solvent, 10c.; Stoddard solvent, 9c., tankcar; 15.2c., tankwagon; V. M. & P. naphtha, 7.5c., tankcar; 13.7c., tankwagon.

KEROSENE.—42-44, water white, 2½c. to 2⅜c. per gallon; 41-43, water white, 2½c. to 2⅝c.

FURNACE OILS.—38-40, straw distillate, 1⅝c. to 2c. per gallon; 36-38, straw zero, 1¾c. to 2c.; 32-36, straw zero, 1¾c. to 1⅞c.; 32-36, dark, zero gas oil, 1¾c.; 32-36, dark, industrial gas oil, ⅞c. to 1⅛c.

FUEL OILS.—28-30, zero, 67½c. to 72½c. per barrel; 26-28, zero, 57½c. to 62½c.; 24-26 zero, 47½c. to 52½c.; 24-26, 32½c. to 37½c.; 18-22, zero, 42½c. to 45c.; 18-22, zero, Chicago switching district only, 42½c. to 45c.; 18-22, 27½c. to 30c.

New Orleans Petroleum

NEW ORLEANS, Apr. 13, 1933.

Stoddard solvent was in fair demand, with the price unchanged at 11c. per gallon in tankcar lots. Naphtha shipments were off.

A light local demand was reported for U.S. motor gasoline. The refinery quotation was steady at 4¼c. per gallon, and 11¼c. delivered, including taxes, freight and inspection. Call for 65-70 octane was fair at the steady price of 4¾c. per gallon at refinery and 11¾c. delivered. There was an increase in quantity foreign shipments of gasoline.

Water-white kerosene continued in fair demand with the price unchanged at 6c. at refinery and 7c. per gallon delivered, including freight, taxes and inspection. Foreign shipments were normal or better.

Bunker C fuel oil was in fair demand at the firm quotation of 60c. per barrel at terminal, and 65c. delivered alongside. Industrial plants in this trading area maintained a steady call for this grade at the unchanged price of 75c. per barrel, delivered. Shipments of crude and lubricating oils increased.

The Globe Oil & Refining Company, Chicago, has contracted for the construction of a battery of Knowles coke ovens at its refinery at Lamont, Ill. The ovens will operate on heavy fuel oil tar from the plant's cracking units, permitting the present equipment to be operated to obtain the maximum yield of high octane number gasoline.

Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 5

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Oil Conservation Plan Offered in Senate Bill

WASHINGTON, Apr. 11, 1933.

A bill to stop the "hot oil racket"—traffic in petroleum produced in violation of State conservation laws—was introduced in the Senate today by Senator Arthur Capper of Kansas. The bill follows a recommendation of the conference of the oil industry and governors of oil producing States in Washington, a recommendation which was endorsed by President Roosevelt. It would make it a criminal offense to deliver to a carrier, to transport in interstate commerce, to transport knowingly, to receive or buy, or to conspire to transport any petroleum or its products produced in violation of any state law.

The Secretary of the Interior would be given the power to investigate the oil industry and prepare demand forecasts, and to recommend to oil-producing States production quotas and uniform conservation laws, including regulation of drilling and unit operation of pools.

S. B. Hunt Retires from Standard Oil Co. of N. J.

Having been in the employ of the Standard Oil Company and affiliated and associated companies continuously since 1894, Seth B. Hunt, a director, vice-president and treasurer of the company since 1919, has resigned and has retired from active business. Mr. Hunt, now sixty-one years old, will take a much-needed rest, as he expressed it, and will devote himself to personal matters entirely. He joined the Standard Oil organization at Providence, R. I., in 1894, and after going through various executive positions became the acting chief executive of the company late last year, when Walter C. Teagle, president, gave up his time to head the campaign for "share-the-work."

During 19 years of his service with the Standard Oil Company, Mr. Hunt was a vice-president. He was treasurer from 1917 to 1919 and was re-elected to that office in 1925. He had been a member of the executive committee since 1927, and a trustee of the stock acquisition plan from its initiation.

Christy Payne, a director, has been elected treasurer to fill the vacancy in that office.' Mr. Payne, who was land department clerk in South Penn Oil Company from 1895 to 1903 and was admitted to the Pennsylvania bar in 1898, has been a director of Standard Oil Company (New Jersey) since 1927. He has been in charge of the company's natural gas operations. Mr. Payne has also been president of the Peoples' Natural Gas Company since 1920.

Denver Oil Bowlers

Denver oil teams in the various bowling leagues, in recent contests, rolled as follows:—

South Denver Merchants League, April 3:—Powerine Oil, 3038, against South Broadway National Bank, 2723.

National League, April 4:—Dixie Oil, 2513, against Watkins Peppers, 2382.

Major League, April 5:—Shell Oil, 2948, against Myer Drug Company, 2867.

Queen City League, April 7:—Merchants Oil, 2419, against Keough-Doyle, 2542.

Trade News Briefs

Iodine is an important component in a new electric storage battery developed in France.

German exports of chloride of magnesia dropped heavily in 1932 to a total of 21,197 tons.

Ichthyol production has been started by a new concern in Reith, near Seefeld in the Tyrol, Austria.

The Colgate-Palmolive-Peet Company, Chicago, omitted the April quarterly dividend of 25 cents per share on the common stock.

Perfumes and cosmetics have been subjected to a stamp tax in Peru. The tax of 0.10 sol per unit will be used to finance an antituberculosis campaign.

Walter McLucas has been elected a director of the Southland Royalty Company, filling a vacancy caused by the recent death of John H. Markham.

The Procter & Gamble Company's 8 percent preferred stock, par $100 a share, has been removed from the trading list of the New York Curb Exchange.

Brazil imported more soda compounds in 1932 than in 1931. Imports of caustic soda amounted to 18,000 metric tons; imports of soda ash to 8,000 tons.

Tolu balsam exports from Colombia (via Puerto Colombia) increased from 59,300 pounds, valued at $30,400, in 1931, to 93,750 pounds, valued at $47,300, in 1932.

Boron minerals imports into Germany in 1932 totaled 29,412 metric tons, 10,000 tons more than those in 1931. The United States supplied all but 143 tons which came from Turkey.

Potash consumption from domestic sources in Poland dropped from 292,000 tons in 1928 to 81,500 tons in 1932. Exports increased up to 1931 to 68,800 tons, but dropped to 60,000 tons in 1932.

The Dr. Miles California Company, State subsidiary of the Dr. Miles Laboratories, Elkhart, Ind., has been given an injunction by Judge Shortall in the San Francisco superior court, restraining the Maurice Mercantile Company, operating a department store, from selling Miles preparations below the minimum resale price stipulated under the California "fair trade" act.

World ammonia production by the Fauser process was potentially 1,079 metric tons of the anhydrous product daily at the end of 1932. Plant capacity was increased 74 tons a day over the year.

Derris cultivation on a large scale has been undertaken by a large European rubber plantation in Sumatra. The concern is reported to have contracted to supply 300 tons of the root annually in the next two years.

The Petroleum Corporation of America's capital stock has been removed from the trading list of the Boston Stock Exchange because of the discontinuance of its Boston transfer agent and registrar.

Belgian superphosphate production increased about 17 percent in 1932 to a total of more than 350,000 metric tons. Exports were 218,000 tons, chiefly to France, the Netherlands, the United Kingdom, and Germany.

Advertising matter, sent by mail or parcel post into Australia, has been reclassified for duty, primage, and sales tax on a combined basis of 2 shillings per pound (general tariff), with an 8-pence preference under the British schedule.

Large phosphate producers in northern Africa are negotiating a merger, according to information from Algeria. The move would combine the Compagnie des Phosphates de Constantine, largest producer in Algeria, and the Compagnie des Phosphate et du Chemin de Fer de Gafsa, leading producer in Tunisia.

R. T. Dickenson, for a number of years employed as a cocoa broker with Rutger, Bleecker & Co., has joined the sales force of Wessel, Duval & Co., this city. Mr. Dickenson will be active in the sale of cocoa beans. This change in employment ended for Mr. Dickenson a period of approximately twenty years as a broker.

Imports, Exports, and Charters

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New York Imports

ACID, CRESYLIC—37 dms, 29,600 lbs, Monsanto Chem Works, Antonia, Liverpool
50 dms, 40,000 lbs, Artigas, Manchester
NAPHTHENIC—74 dme, 31,478 lbs, Shell Eastern Petroleum Prod Co, Deutschland, Hamburg
STEARIC—20 cs, Innis, Speiden & Co, Statendam, Rotterdam
9 bgs, American Express Co, Statendam, Rotterdam
TANNIC—6 cks, American Dyewood Co, Transylvania, Glasgow

ALBUMEN PROD IMPURE—9 cks, 5,453 lbs, Franklin Import & Export Co, Deutschland, Hamburg
VEGETABLE—21 cs, President Harding, Hamburg

AMMONIA, PERCHLORATE—50 cks, 6,417 lbs, International Selling Corpn, Schodack, Havre
SULPHATE—600 bgs, Bradley & Baker, Statendam, Rotterdam

ANISE, STAR—40 bgs, 4,400 lbs, Lunham & Reeve, Inc, Excambion, Marseilles

ARGOLS—174 bgs, Saturnia, Naples

ARROWROOT—200 bgs, Morningstar, Nicol, Inc, Nerissa, St Vincent
2 bgs, Corn Product Refining Co, Solhavn, Puerto Plata

ARTISTS' MATERIAL—9 cs, Gallagher & Ascher, Statendam, Rotterdam
2 cs, Winsor & Newton, American Trader, London

ASPHALT—561 cks, Roofings, Inc, Berlin, Bremen

BALSAM—10 dms, J R Morz & Co, Hubert, Para

BARIUM HYDRATE—16 cks, D F Young, American Trader, London

BAY RUM—137 dms, Bornn Distilling Co, Neriesa, St Thomas

BARYTES—112 bgs, Wishnick-Tumpeer, Inc, Antonia, Liverpool

BLOOD, DRIED—1 ck, Rawlplug Co, Inc, Antonia, Liverpool

BONE MEAL—1,225 bgs, The Ore & Chem Corpn, Deutschland, Hamburg
908 bgs, 100,989 lbs, Swift & Co, Paraguayo, Rosario
1,500 bgs, Coldbrook, Buenos Aires

BREWERS PITCH—20 cs, P H Petry & Co, Berlin, Bremen

BRISTLES—7 cs, Globe Shipping Co, Deutschland, Hamburg
5 cs, Schenker & Co, American Trader, London
5 cs, Chesnut, Cooper & Co, American Trader, London
5 cs, American Trader, London
4 cs, Polack Co, Inc, Majestic, Southampton
1 cs, F H Cone & Co, Inc, Majestic, Southampton

BRONZE POWDER—14 dms, Hensel, Bruckmann & Lorbacher, Berlin, Bremen
1 cs, American Express Co, Berlin, Bremen

BUCHU LEAVES—10 bls, Brown Bros, Majestic, Southampton

CALCIUM NITRATE—840 bgs, Synthetic Nitrogen Product Corp, Stavangerfjord, Germany
100 bgs, 10,199 lbs, Synthetic Nitrogen Product Corp, United States, Oslo

CANARY SEED—528 bgs, Bunge North America Grain Co, Western World, Buenos Aires

CARAWAY SEED—200 bgs, 22,000 lbs, Levy & Levis Co, Statendam, Rotterdam
200 bgs, 22,000 lbs, R L Friedler, Statendam, Rotterdam
50 bgs, 5,500 lbs, A G Dunn, Statendam, Rotterdam
200 bgs, 22,000 lbs, Durkee Famous Food, Inc, Statendam, Rotterdam
100 bgs, 11,000 lbs, Black Diamond Seed Co, Statendam, Rotterdam
100 bgs, 11,000 lbs, National Commission Co, Statendam, Rotterdam
550 bgs, 60,500 lbs, Statendam, Rotterdam

CARBON, DECOLORING—147 bgs, R W Greeff & Co, Statendam, Rotterdam

CARDAMOM—5 cs, American Trader, London

CASCARILLA BARK—2 bls, 5 bgs, Cohen & Co, Inc, Munargo, Nassau

CASSIA—50 bls, President Adams, Hongkong
ROLLS—50 cs, President Adams, Hongkong

CASTOR BEANS—1,850 bgs, 6,475 bu, Bank of Manhattan, Coldbrook, Bahia
3,388 bgs, 11,858 bu, Baker Castor Oil Co, Coldbrook, Pernambuco
15,240 bgs, 53,340 bu, Paraguayo, Santos
6,400 bgs, 22,400 bu, Western World, Santos

CELERY SEED—10 bgs, 2,200 lbs, Excambion, Marseilles
5 bgs, J L Hopkins & Co, President Adams, Marseilles
30 bgs, Van Loan & Co, President Adams, Marseilles

CHALK—130 bgs, Isbrandtsen Moller Co, United States, Copenhagen
BLOCK—510,000 kilos, J W Higman Co, Schodack, Dunkirk
PRECIPITATED—500 bgs, 50 cks, H J Baker & Bros, Sea Victory, Bristol
30 bgs, Lo Curto & Funk, American Trader, London
125 bgs, H J Baker Bros, Antonia, Liverpool

CHAMOMILE FLOWERS—10 cs, Allaire, Woodward & Co, President Harding, Hamburg
14 cs, Saturnia, Trieste

CHEMICALS—20 bgs, Schering Corp, Hamburg, Hamburg
14 cks, 12,212 lbs, Robinson-Wagner Co, Deutschland, Hamburg
75 dms, 31,185 lbs, Irving Trust Co, Hamburg, Hamburg
10 bbls, 1,240 lbs, Titan Shipping Co, Deutchland, Hamburg
15 bbls, 7,557 lbs, E M Sargeant Co, Deutschland, Hamburg
15 cks, 11,453 lbs, Roessler & Hasslacher Chem Co, Deutschland, Hamburg
17 cks, 12,040 lbs, Roessler & Hasslacher Chem Co, Deutschland, Hamburg
48 cks, 36,604 lbs, Roessler & Hasslacher Chem Co, Deutschland, Hamburg
9 cs, Sandoz Chem Works, Deutschland, Hamburg
33 cks, 23,430 lbs, E I du Pont de Nemours Co, Deutschland, Hamburg
3 cs, 501 lbs, Pfaltz & Bauer, Deutschland, Hamburg
100 cks, Advance Solvents & Chem Corp, Stavangerfjord, Oslo
2 cks, Stanley Doggett, Inc, Europa, Bremen
2 cs, Bayer Co, Europa, Bremen
1 dm, Schenker & Co, President Harding, Hamburg
22 cks, E I du Pont de Nemours & Co, President Harding, Hamburg

CHEMICALS—6 cks, 5 dms, 24 cs, Eimer & Amend, President Harding, Hamburg
3 cks, J H Lowenstein & Son, President Harding, Hamburg
40 bbls, Innis, Speiden & Co, Berlin, Bremen
20 cs, Pfaltz & Bauer, Berlin, Bremen
6 carboys, 8 cks, 6 kegs, 27 cs, Pfaltz & Bauer, Berlin, Bremen
23 cks, Philipp Bros, Inc, Statendam, Rotterdam
23 cks, Innis, Speiden & Co, Statendam, Rotterdam
20 cs, Eli Lilly & Co, Statendam, Rotterdam
34 bbls, American Fluoride Co, Statendam, Rotterdam
30 dms, Wood, Niebuhr & Co, Statendam, Rotterdam
3 cks, Statendam, Rotterdam
49 cks, Robinson-Wagner Co, Statendam, Rotterdam
15 cks, American Bluefriesveen, Inc, Statendam, Rotterdam
55 bbls, Robinson-Wagner Co, Statendam, Rotterdam
15 carboys, 17 cs, Merck & Co, Statendam, Rotterdam
20 dms, W S Armstrong, Statendam, Rotterdam
2 cs, Burroughs, Welcome & Co, American Trader, London
150 cks, Rohner & Gehrig, Hamburg, Hamburg
46 cks, 26,272 lbs, Robinson-Wagner Co, Hamburg, Hamburg
224 bgs, Innis, Speiden & Co, Transylvania, Glasgow
46 cs, 5 bbls, Bergstrom Trading Co, Gripsholm, Gothenburg
20 cks, Lo Curto & Funk, Antonia, Liverpool
2 cs, G J Wallau, Paris, Havre
15 cks, A Hurst & Co, Paris, Havre
6 cs, Italian Drug Importing Co, Saturnia, Naples

CHILLIES—138 bgs, W T Rawleigh Co, West Humhaw, Freetown

CHINA CLAY—120 bgs, Orbis Product Trading Co, Antonia, Liverpool

CHLOROPHYL—4 cs, 572 lbs, Harshaw Chem Co, Deutschland, Hamburg

CINCHONA BARK—22 bls, J L Hopkins & Co, Statendam, Rotterdam
PRODUCTS—84 cs, R W Greeff & Co, Statendam, Rotterdam

CINNAMON—50 bls, Volkart Bros, Siamese Prince, Colombo

CLAY—600 bgs, 132,000 lbs, L A Salomon & Bros, President Harding, Hamburg

CLOVES—200 bls, Truda & Quattrone, President Adams, Port Said

COALTAR DERIVATIVE — 28 cks, General Aniline Works, Statendam, Rotterdam
INTERMEDIATE—186 cks, General Aniline Works, Statendam, Rotterdam
38 cks, 3 cs, P C Kuyper & Co, Statendam, Rotterdam

COBALT, METAL—20 cks, 2,171 lbs, Belgo American Trading Corp, Black Gull, Antwerp
OXIDE BLACK—30 cks, 11,695 lbs, Belgo American Trading Corp, Black Gull, Antwerp

COCOA BEANS—450 bgs, Gordon Grant & Co, Western World, Trinidad
250 bgs, Wessel, Kulenkampf & Co, Western World, Trinidad
300 bgs, Gillespie & Co, Western World, Trinidad
500 bgs, W R Grace & Co, Western World, Trinidad
450 bgs, Royal Bank of Canada, Western World, Trinidad
500 bgs, Western World, Trinidad
247 bgs, G B Ollivant & Co, West Humhaw, Apapa
4,556 bgs, United Africa Co, West Humhaw, Apapa
1,170 bgs, G B Ollivant & Co, West Humhaw, Lagos
4,535 bgs, United Africa Co, West Humhaw, Lagos
1,648 bgs, The Aries Co, West Humhaw, Abidjan
30 bgs, Royal Bank of Canada, Thyra, Sanchez
1,100 bgs, Irving Trust Co, Thyra, Sanchez
1,000 bgs, Thyra, Sanchez
208 bgs, Wood & Selick, Thyra, Puerto Plata
450 bgs, Irving Trust Co, Thyra, Puerto Plata
4,343 bgs, W & A Leaman, President Harding, Hamburg
45 bgs, Coamo, Mayaguez
200 bgs, Half Moon Mfg Co, Statendam, Rotterdam
1,850 bgs, Nerissa, Trinidad
250 bgs, Nerissa, Grenada
250 bgs, Daarnhouwer & Co, Pastores, Guayaquil
300 bgs, Irving Trust Co, Castor, Puerto Plata
250 bgs, Royal Bank of Canada, Castor, Puerto Plata
115 bgs, Irving Trust Co, Castor, Puerto Plata
200 bgs, Carr Bros, Castor, Puerto Plata
50 bgs, Lopez & Mangual, Carabobo, Maracaibo
1,700 bgs, Carabobo, Puerto Cabello
1,500 bgs, Scholtz & Co, Carabobo, La Guayra
563 bgs, Carabobo, La Guayra
47 bgs, W & A Leaman, Flora, Jeremie
20 bgs, Curacao Trading Co, Flora, Jeremie
73 bgs, Curacao Trading Co, Flora, Jeremie
2,350 bgs, Flora, Puerto Cabello
200 bgs, Royal Bank of Canada, Flora, Puerto Cabello
210 bgs, Transmarine Mercantile Corp, Flora, Cape Haitien
1,500 bgs, Nieschlag & Co, Coldbrook, Bahia
3,000 bgs, Willard Hawes & Co, Coldbrook, Bahia
500 bgs, National City Bank, Coldbrook, Bahia
1,000 bgs, W R Grace & Co, Coldbrook, Bahia
250 bgs, Banca Coml Italian Trust Co, Coldbrook, Bahia
500 bgs, J Aron & Co, Coldbrook, Bahia
1,000 bgs, Wessel, Kulenkampf & Co, Coldbrook, Bahia
500 bgs, Irving Trust Co, Solhavn, Sanchez
40 bgs, Royal Bank of Canada, Solhavn, Sanchez
360 bgs, Curacao Trading Co, Solhavn, Sanchez
250 bgs, Curacao Trading Co, Solhavn, Puerto Plata
690 bgs, Royal Bank of Canada, Solhavn, Puerto Plata

COCONUT—1,000 bgs, 100,000 lbs, Franklin Baker Co, Platano, Belize
850 bgs, 85,000 lbs, Franklin Baker Co, Amapala, Kingston
400 bgs, 40,000 lbs, Di Giorgio Fruit Corp, Amapala, Kingston
37 bgs, 3,700 lbs, Fruit Dispatch Co, Platano, Port Cortes
38 bgs, 3,800 lbs, A Schwartz Corp, Coamo, Mayaguez
60 bgs, 6,000 lbs, Coamo, Mayaguez
104 bgs, 10,400 lbs, Park, Holtorf & Guy, Nerissa, St Lucia
550 bgs, 55,000 lbs, A A Lindo & Co, Pastores, Kingston
250 bgs, 25,000 lbs, Fruit Dispatch Co, Pastores, Kingston
200 bgs, 20,000 lbs, Mann, Duane & Co, Pastores, Kingston
2,227 bgs, 222,700 lbs, Franklin Baker Co, Pastores, Kingston
750 bgs, 75,000 lbs, Geo W Cole & Co, Pastores, Kingston
425 bgs, 42,500 lbs, Universal Import & Export Co, Pastores, Kingston
700 bgs, 70,000 lbs, Franklin Baker Co, Pastores, Cristobal

DESIC—150 cs, Habicht, Braun & Co, Siamese Prince, Colombo
100 cs, Dodwell & Co, Siamese Prince, Colombo

COLORS—1 cs, P C Kuyper & Co, Statendam, Rotterdam
DRY—4 bbls, 462 lbs, C J Osborn & Co, Deutschland, Hamburg
1 cs, Devoe & Raynolds, President Harding, Hamburg
1 ck, Sieman & Elting, Statendam, Rotterdam
20 cks, 20 kgs, Whittaker, Clark & Daniels, American Trader, London

EARTH—5 cks, Hensel Bruckmann & Lorbacher, Deutschland, Hamburg
47 cks, Calco Chem Co, President Harding, Hamburg
1 cs, Massee & Co, Inc, Berlin, Bremen
50 cks, C J Osborn & Co, Statendam, Rotterdam
15 cks, Robinson-Wagner Co, Statendam, Rotterdam
PIGMENT—6 cs, P C Kuyper & Co, Statendam, Rotterdam

COPRA—68 bgs, Franklin Baker Co, Amapala, Kingston
15 bgs, Franklin Baker Co, Pastores, Kingston

CUTCH—1,790 bgs, Philippine Cutch Corp, President Adams, Manila

DRAGON'S BLOOD—11 cs, President Adams, Singapore

DRUGS—1 bg, Meht & Daniels, President Harding, Hamburg
2 bgs, Meht & Daniels, Hamburg, Hamburg

DUTCH METAL—2 cs, Hensel Bruckmann & Lorbacher, Berlin, Bremen

DYES, ALIZARIN—13 cks, 2 jugs, P C Kuyper & Co, Statendam, Rotterdam
ANILIN—25 cks, Sandoz Chem Works, Deutschland, Hamburg
9 bbls, L & B Organic Prod Co, Black Gull, Antwerp
10 cs, 2 jugs, 130 cks, P C Kuyper & Co, Statendam, Rotterdam
5 cyls, Sandoz Chem Works, Paris, Havre
11 cks, Carbic Color & Chem Co, Paris, Havre
11 cks, The Geigy Co, Inc, Paris, Havre
90 cks, The Ciba Co, Inc, Paris, Havre

EPSOM SALT—400 bgs, Berlin, Bremen

FILTER MASS—20 bls, 4,752 lbs, Atlantic Forwarding Co, Deutschland, Hamburg
100 bls, P H Petry & Co, President Harding, Hamburg
PAPER—7 cs, H Reeve Angel & Co, American Trader, London
147 bls, J Manheimer, Majestic, Southampton

FLAXSEED—5,004 tons, 200,160 bu, Bunge North America Grain Co, Paraguayo, Rosario

FLEASEED—50 bls, 11,000 lbs, P H Petry & Co, Excambion, Marseilles
50 bgs, 11,165 lbs, Schieffelin & Co, Excambion, Marseilles
140 bgs, 30,800 lbs, Kachurin Drug Co, Excambion, Marseilles
10 bgs, 2,200 lbs, A J Bracher & Co, Excambion, Marseilles
70 bgs, 15,400 lbs, E E Marks & Co, Excambion, Marseilles
50 bgs, 11,000 lbs, Lunham & Reeve, Inc, Excambion, Marseilles
544 bgs, President Adams, Bombay
60 bgs, S B Penick & Co, Inc, President Adams, Bombay
100 bgs, President Adams, Marseilles

FLOWERS, MEDICINAL—26 bgs, 2,686 lbs, S B Penick & Co, Inc, Deutschland, Hamburg
15 bls, Saturnia, Trieste

GAMBIER—106 cs, E E Androvette, Troilus, Singapore
287 bgs, Hammond & Carpenter, Troilus, Singapore
680 cs, L Littlejohn & Co, Troilus, Tandjong Balei

GELATIN—5 cs, 1,603 lbs, Paul Puttmann, Deutschland, Hamburg
10 cs, American Express Co, Deutschland, Hamburg
2 bls, 12 cks, Heicke Gelatine Works, Deutschland, Hamburg
200 bgs, C M Van Stolk, Statendam, Rotterdam
1 pkg, Kern & Co, Paris, Havre
10 cs, International Selling Corpn, Paris, Havre

GENTIAN ROOT—21 bls, J L Hopkins & Co, President Adams, Marseilles
43 bls, President Adams, Marseilles
67 bgs, A E Rittwagen, Paris, Havre

GINGER ROOT—100 bgs, Superintendence Co, Inc, West Humhaw, Freetown
389 bgs, Cie Francaise de l'Afrique, West Humhaw, Freetown
1,564 bgs, West Humhaw, Freetown
15 bgs, Barclay Bank, Pastores, Kingston

GLASS, PLATE—14 cs, Deutschland, Hamburg
2 cs, American Express Co, Berlin, Bremen

SAND—24 cks, 5,277 lbs, A Hurst & Co, Deutschland, Hamburg
SHEET—6 cs, L Solomon & Son, Deutschland, Hamburg
1 cs, Bienenfeld Import Co, Deutschland, Hamburg
WINDOW—5 cs, Bienenfeld Import Co, Deutschland, Hamburg
24 cs, Semon, Bache & Co, Deutschland, Hamburg
9 cs, Deutschland, Hamburg

GLAUBER SALT—10 bbls, 4,752 lbs, Pfaltz & Bauer, Deutschland, Hamburg

GLUE—206 bgs, N L Lederer, Deutschland, Hamburg
100 bgs, Heicke Gelatine Works, Deutschland, Hamburg
112 bls, T M Duche & Sons, Black Gull, Antwerp
300 bgs, C M Van Stolk, Statendam, Rotterdam
132 bgs, Statendam, Rotterdam
40 bls, International Selling Corp, Paris, Havre
100 bgs, Paris, Havre
300 bgs, Saturnia, Trieste

GLYCERIN—11 dms, 14,139 lbs, H W Henning & Son, Hamburg, Hamburg

GREASE—26 dms, 10,830 lbs, E I du Pont de Nemours Co, Deutschland, Hamburg
WOOL—50 cks, Chase Natl Bank, Berlin, Bremen
4 cks, Burroughs, Welcome & Co, American Trader, London
15 bbls, 10 dms, Hummel Chem Co, Antonia, Liverpool

GUM, ARABIC—5 bgs, Dollar S S Line, President Adams, Alexandria
BENZOIN—67 cs, F B Ross & Co, President Adams, Singapore
5 cs, Paris, Havre
CHICLE—563 bgs, Chicle Development Co, Oriente, Vera Cruz
233 bgs, Mexican Exploitation Co, Oriente, Vera Cruz
COPAL—105 bgs, A Klipstein & Co, Siamese Prince, Singapore
105 bgs, O G Innes Corp, Siamese Prince, Singapore
35 bgs, Chase Natl Bank, Siamese Prince, Singapore
382 baskets, France, Campbell & Darling, Siamese Prince, Macassar
193 baskets, M L Van Norden, Siamese Prince, Macassar
180 baskets, Gillespie-Rogers-Pyatt Co, Siamese Prince, Macassar
70 bgs, Karr, Ellis & Co, Inc, Antonia, Liverpool
DAMMAR—192 bgs, O G Innes Corp, Siamese Prince, Singapore
70 bgs, G W S Patterson & Co, Siamese Prince, Singapore
210 bgs, A Klipstein & Co, Siamese Prince, Singapore
35 bgs, Chase Natl Bank, Siamese Prince, Singapore
210 bgs, France, Campbell & Darling, Siamese Prince, Singapore
27 cs, Thurston & Brandich, Siamese Prince, Macassar
1 parcel, M Rothschild & Co, Inc, President Adams, Singapore
50 cs, S Winterbourne & Co, President Adams, Singapore
192 bgs, 50 cs, S Winterbourne & Co, President Adams, Singapore
ELEMI—27 cs, O G Innes & Corp, President Adams, Manila
INDUSTRIAL—50 cs, President Adams, Marseilles
KARAYA—280 bgs, Frank Vliet Co, Inc, President Adams, Bombay
299 bgs, President Adams, Bombay
OLIBANUM—20 cs, National City Bank, President Adams, Bombay
TRAGACANTH—40 bgs, Paul A Dunkel & Co, American Trader, London
14 cs, Paul A Dunkel & Co, Hamburg, Hamburg
46 bgs, President Adams, Bombay

GYPSUM—820 bgs, Berlin, Bremen

HENNA LEAVES—229 bgs, President Adams, Alexandria
104 bgs, Victor Levy, Steel Scientist, Port Said

HERBS, MEDICINAL—40 bls, 13,970 lbs, P H Petry & Co, Excambion, Genoa
20 bls, 6,723 lbs, American Shipping Co, Hamburg, Hamburg
6 bls, 1,174 lbs, Peek & Velsor, Hamburg, Hamburg
18 bls, First National Bank, Saturnia, Trieste

HOPS—130 bls, S S Steiner, Deutschland, Hamburg
44 bls, R F Downing & Co, Deutschland, Hamburg
10 bls, M A Kerner, President Harding, Hamburg
16 bls, P H Petry & Co, Statendam, Rotterdam
10 bls, Ludwig Baer, Statendam, Rotterdam
PRESSED—29 bls, 16,033 lbs, P H Petry & Co, Deutschland, Hamburg

HYDROSULPHITE—100 dms, President Harding, Hamburg

IRIDIUM—1 cs, Amtorg Trading Corpn, Deutschland, Hamburg

IRON CHLORIDE—85 cks, 33,473 lbs, Philipp Bros, Inc, Deutschland, Hamburg
ORE—8,000 tons, Amtorg Trading Corpn, Illingworth, Nicolaioff
OXIDE—31 cks, C J Osborn & Co, American Trader, London
30 cks, Wishnick-Tumpeer, Inc, Antonia, Liverpool
3 cks, C B Crystal & Co, Inc, Antonia, Liverpool

ISINGLASS—9 cs, C H Reisig, Antonia, Liverpool

JUNIPER BERRIES—45 bgs, Allaire, Woodward & Co, Saturnia, Trieste

LAVENDER FLOWERS—6 kegs, Yardley & Co, American Trader, London
8 bls, 1,073 lbs, P H Petry & Co, Excambion, Marseilles
8 bls, 946 lbs, Peek & Velsor, Inc, Excambion, Marseilles

LEAVES, MEDICINAL—3 bgs, Meht & Daniels, Hamburg, Hamburg
13 bls, S B Penick & Co, Inc, President Adams, Marseilles

LYE—56 cks, Netto Importing Co, Paris, Havre

MACE—23 cs, I Harrison & Whitney, Statendam, Rotterdam
18 cs, J Clarke & Co, Nerissa, Grenada
15 cs, F B Ross & Co, President Adams, Singapore

MAGNESIA, CALCINED—16 cs, Schofield-Donald Co, Antonia, Liverpool
CARBONATE—9 cs, Schofield-Donald Co, Antonia, Liverpool
CHLORIDE—20 dms, Philip Rahm, Antonia, Liverpool

MEDICINAL PREPARATION—25 cs, Dunlap & Lyon, Antonia, Liverpool

MUSTARD SEED—250 bgs, Gale T German, Statendam, Rotterdam

NUTGALLS—60 bgs, Saturnia, Trieste

NUTMEGS—20 bgs, John Clarke & Co, Nerissa, Grenada
25 bgs, Nerissa, Grenada

OENANTHOL—2 cks, Paris, Havre

OIL, ALMOND—40 cs, Fritzsche Bros, President Adams, Marseilles
BAY—14 cs, Nerissa, Dominica

OIL, CINNAMON LEAF—1 bot, Eric Coupey, President Adams, Colombo
6 dms, R C Treatt & Co, President Adams, Bombay
5 dms, President Adams, Bombay
CITRONELLA—10 dms, President Adams, Colombo
1 bot, Eric Coupey, President Adams, Colombo
6 dms, Van Ameringen Haebler, Steel Scientist, Batavia
COCONUT—425 tons, Procter & Gamble Co, Siamese Prince, Cebu
907 tons, Philippine Refg Co, Troilus, Manila
15 cyls, J H Vavasseur & Co, President Adams, Colombo
COD—52 cks, Fred W Damon, Dominica, St Johns
30 cks, Robt Badcock & Co, Dominica, St Johns
100 bbls, Stavangerfjord, Oslo
150 cks, E M Javitz & Son, Stavangerfjord, Aalesund
CODLIVER—65 dms, P R Dreyer, Deutschland, Hamburg
700 dms, 120 bbls, McKesson & Robbins, Stavangerfjord, Bergen
500 bbls, Scott & Bowne, Stavangerfjord, Bergen
200 dms, Consumers Import Co, Stavangerfjord, Bergen
50 dms, Stavangerfjord, Bergen
50 bbls, Wm Benkert & Co, Stavangerfjord, Bergen
510 dms, McKesson & Robbins, Deutschland, Hamburg
ESSENTIAL—10 cs, Deutschland, Hamburg
1 cs, Europa, Bremen
1 bbl, 13 cs, President Harding, Hamburg
3 cs, Yardley & Co, American Trader, London
6 cks, 9 cs, President Adams, Marseilles
111 cs, Paris, Havre
2 cs, Meht & Daniels, Hamburg, Hamburg
FISH—50 pkgs, E J Kennes & Co, Black Gull, Antwerp
FUEL—53,497 bbls, Anglo Mexican Petroleum Corp, San Quirino, Puerto Mexico
2,748,508 gls, Tidewater Oil Co, E L Shea, Aruba
101,000 bbls, Standard Oil Co of N J, E M Clark, Aruba
105,000 bbls, Mexican Petroleum Corp, Victolite, Aruba
68,704 bbls, Asiatic Petroleum Corp, Storaas, Curacao
GERANIUM—3 dms, Yardley & Co, American Trader, London
5 dms, Truda & Quattrone, President Adams, Port Said
HAARLEM—25 cs, Kronfeld, Saunders & Co, Statendam, Rotterdam
JUNIPER—2 cks, 873 lbs, Dodge & Olcott Co, Deutschland, Hamburg
LINSEED—50 bbls, I R Boody & Co, Statendam, Rotterdam
LUBRICATING—20 dms, Heemsoth & Basse, Hamburg, Hamburg
2 cs, Vacuum Oil Co, Antonia, Liverpool
MINERAL—68 dms, S S Schwabacher & Co, Deutschland, Hamburg
155 dms, Schliemann Co, Deutschland, Hamburg
OLIVE—53 cs, President Harding, Hamburg
15 dms, Commercial Bank of Greece, President Adams, Naples
135 dms, 3,273 cs, President Adams, Genoa
100 bbls President Adams, Marseilles
175 cs, Saturnia, Naples
6 cks, F Bornanno, Saturnia, Palermo
20 cks, Columbo Co, Saturnia, Palermo
137 cs, 10 cks, Saturnia, Palermo
ORANGE BITTER—4 cs, Magnus, Mabee & Raynard, Pastores, Kingston
ORANGE SWEET—20 cs, Magnus, Mabee & Raynard, Pastores, Kingston
20 cs, Everett Heaney & Co, Pastores, Kingston
PALM—4,103,526 lbs, United Africa Co, West Humhaw, Matadi
414 tons, Siamese Prince, Belawan Deli
418 bbls, United States Steel Prod Co, Steel Scientist, Port Swettinham
50 bbls, Antonia, Liverpool
PETITGRAIN — 25 cs, Coldbrook, Buenos Aires
ROSE—2 cs, Yardley & Co, American Trader, London
2 cs, Magnus, Mabee & Raynard, Paris, Havre
5 cs, Shipkoff & Co, Inc, Paris, Havre
SEAL—72 cks, Bowring & Co, Dominica, St Johns
SUNFLOWERSEED—50 dms, Balfour-Guthrie Co, Statendam, Rotterdam
VEGETABLE—20 cs, Fries Bros, Deutschland, Hamburg
YLANG YLANG—5 cs, W T Rawleigh Co, President Adams, Marseilles
OPIUM—4 cs, 770 lbs, Merck & Co, President Harding, Hamburg
30 cs, Merck & Co, President Adams, Naples
10 cs, Cie Generale Transatlantique, President Adams, Marseilles
4 cs, Eli Lilly & Co, Saturnia, Trieste
ORRISROOT—1 kg, Yardley & Co, American Trader, London
PAINT—1 dm, Andrew Baxter, Transylvania, Glasgow
ENAMEL—20 dms, Majestic, Southampton
PAPAIN—10 cs, J L Hopkins & Co, President Adams, Colombo
PAPRIKA—75 bgs, Schenker & Co, Deutschland, Hamburg
20 bgs, Chemical Bank & Trust Co, President Harding, Hamburg
10 bgs, Phoenix Shipping Co, President Harding, Hamburg
PATCHOULI LEAVES — 117 bls, Siamese Prince, Penang
93 bls, Troilus, Tandjong Balei
44 bls, President Adams, Penang
PEAT, MOSS—204 bls, Alfred T Long, Scanyork, Copenhagen
697 bls, Premier Peatmoss Corp, Scanyork, Copenhagen
2,317 bls, Consumers Import Co, Gripsholm, Gothenburg
MULL—600 bls, Berlin, Bremen
200 bls, McHutcheson & Co, Berlin, Bremen
PEPPER, BLACK—1,250 bgs, Catz American Co, Siamese Prince, Oosthaven
250 bgs, Siamese Prince, Oosthaven
660 bgs, Catz American Co, Siamese Prince, Batavia
WHITE—81 bgs, Siamese Prince, Oosthaven
140 bgs, President Adams, Singapore
PETROLEUM—92,946 bbls, Gulf Refg Co, Gulfwax, Las Piedras
147,000 bbls, Standard Oil Co of N J, John D Archbold, Mamomal
PHOSPHATE—1 pkg, T M Duche & Sons, Black Gull, Antwerp
PIMENTO—200 bgs, McCormack & Co, Inc, Pastores, Kingston
100 bgs, Barclay Bank, Metapan, Kingston
PLASTER—250 bgs, 55,000 lbs, A V Berner Co, Schodack, Havre
POPPYSEED—100 bgs, Berlin, Bremen
100 bgs, A G Dunn, Statendam, Rotterdam
50 bgs, The Hinrichs Co, Statendam, Rotterdam
150 bgs, Knickerbocker Mills Co, Statendam, Rotterdam
100 bgs, Statendam, Rotterdam
150 bgs, President Adams, Naples
POTASH, CHLORATE—100 cks, 12,641 lbs, International Selling Corp, Schodack, Havre
50 bbls, 6,228 lbs, Charles Hardy, Inc, Schodack, Havre
20 kegs, Atlantic Freighting Corp, Gripsholm, Gothenburg
POTATO MEAL—10 bgs, President Harding, Hamburg
PYRETHRUM FLOWERS—49 bls, Wm Benkert & Co, Saturnia, Trieste
17,700 lbs, J L Hopkins & Co, Saturnia, Trieste
PYRITES—6,605,000 kilos, The Pyrites Co, Uganda, Huelva
QUEBRACHO EXTRACT—7,443 bgs, The Tannin Corp, Pasaguayo, Buenos Aires
2,500 bgs, International Product Corp, Western World, Buenos Aires
QUICKSILVER—50 flasks, Chase National Bank, Oriente, Vera Cruz
QUINCE SEED—(Correction). In the issue of March 27 M Tabibian, Inc, was credited with 25 bgs; should have read 14 bgs, 2,600 lbs, M Tabibian, Inc, and 11 bgs, 2,114 lbs, E Meer & Co, Exeter, Beyrouth
RAPESEED—70 bgs, Wagner Bros Feed Co, Statendam, Rotterdam
ROOT, MEDICINAL—4 bgs, Saturnia, Trieste
22 bgs, 4,928 lbs, S B Penick & Co, Inc, Deutschland, Hamburg
10 bgs, Meht & Daniels, President Harding, Hamburg
7 bgs, 913 lbs, Fred H Wrede, Black Gull, Antwerp
8 bgs, 609 lbs, Peek & Velsor, Inc, Hamburg, Hamburg
ROSIN—2 pkgs, Standard Oil Development Co, Deutschland, Hamburg
37 cs, Santo Domingo & Co, Hubert, Para
SAGO FLOUR—370 bgs, Stein, Hall & Co, Siamese Prince, Singapore
SALT—200 bgs, Independent Salt Co, Flora, Turks Island
1 bg, Middleton & Co, Flora, Turks Island
SARSAPARILLA ROOT—11 bls, F W Pabst, Agwistar, Tampico
SEEDS, MEDICINAL—6 bgs, Meht & Daniels, President Harding, Hamburg
1 bg, 151 lbs, Peek & Velsor, Inc, Hamburg, Hamburg
40 bgs, Saturnia, Trieste
SHELLAC—30 cs, J Henry Schroeder Banking Corp, Deutschland, Hamburg
SOAP—12 cs, Yardley & Co, American Trader, London
2 cs, Milton Snedeker Corp, American Trader, London
2 cs, Maurice Levy, Paris, Havre
MILLINGS—2 cs, Yardley & Co, American Trader, London
TOILET—6 cs, Bourjois Sales Corp, Majestic, Southampton
SODA, ANTIMONIATE—565 bgs, American Smelting & Refg Co, Agwistar, Tampico
BICHROMATE—10 bbls, Grasselli Chem Co, Munargo, Havana
SPONGES—21 bls, World Sponge Market, Morro Castle, Havana
7 bls, Morro Castle, Havana
3 bls, J H Rhodes & Co, Excambion, Marseilles
5 bls, J H Rhodes & Co, Oriente, Havana
16 bls, J E Bernard & Co, Oriente, Havana
28 bls, Phoenix Shipping Co, Munargo, Nassau
REFUSE—15 bls, J H Rhodes & Co, Oriente, Havana
3 bls, J E Bernard & Co, Oriente, Havana
8 bls, Phoenix Shipping Co, Munargo, Nassau
10 bls, Gulf & New York West Indies Co, Munargo, Nassau
53 bls, J H Rhodes & Co, Munargo, Nassau
7 bls, American Sponge & Chamois Co, Munargo, Nassau
SQUILL—9 bls, J L Hopkins & Co, President Adams, Marseilles
STARCH, RICE—175 bbls, Habicht, Braun & Co, Berlin, Bremen
270 bgs, P A Gaynor & Co, Black Gull, Antwerp
STEARIN PITCH—15 dms, Allied Asphalt & Mineral Corpn, Statendam, Rotterdam
SULPHUR—3 cks, American Cyanamid & Chem Co, Paris, Havre
LAC—5 cks, Antonia, Liverpool
REFINED—5 cks, Antonia, Liverpool
TAPIOCA FLOUR—792 bgs, Chase National Bank, Steel Scientist, Sourabaya
250 bgs, Paris, Havre
2,394 bgs, Corn Product Refining Co, Solhavn, Puerto Plata
THYME LEAVES—20 bls, President Adams, Marseilles
TUBA ROOT—19 bls, Dodwell & Co, President Adams, Singapore
20 bls, F B Ross & Co, President Adams, Singapore
UMBER—8 cks, C B Crystal & Co, Inc, Antonia, Liverpool
UREA—908 bgs, Advance Solvents & Chem Corpn, Statendam, Rotterdam
VANILLA BEANS—39 cs, Royal Bank of Canada, Nerissa, Guadeloupe
38 cs, 3 ctns, W T Rawleigh Co, President Adams, Marseilles
34 cs, P P Derode Freres & Dammann, Neriessa, Marseilles
85 cs, President Adams, Marseilles
4 cs, Zinc & Trieste, Oriente, Vera Cruz
4 cs, F Huber & Co, Oriente, Vera Cruz
8 cs, Renato de Cueta, Oriente, Vera Cruz
VARNISH — 1 cs, Henschel, Naeve Co, Deutschland, Hamburg
25 bbls, Sinclair-Valentine Co, Statendam, Rotterdam
WAX, BEES—51 bgs, H H Pike & Co, Peten, Havana
24 bgs, Schutte & Focke, Coamo, Santo Domingo
1 cs, Yardley & Co, American Trader, London
22 bgs, R Desvernine, Cuyamapa, Santiago
11 bgs, Curacao Trading Co, Castor, Puerto Plata
23 bgs, D Steengrafe, Oriente, Havana
40 cs, Orbis Product Trading Co, Paris, Havre
13 bgs, Irving Trust Co, Solhavn, Sanchez
CANDELILLA—230 bgs, C Paez, Agwistar, Tampico
9 bgs, Agwistar, Tampico
CARNAUBA—833 bgs, Strohmeyer & Arpe Co, Hubert, Para
234 bgs, C W Jacob & Allison, Hubert, Para
112 bgs, Smith & Nichols, Hubert, Para
68 bgs, Innis, Speiden & Co, Hubert, Para
85 bgs, First National Bank of Boston, Hubert, Para
575 bgs, Chase National Bank, Hubert, Para
56 bgs, Hubert, Para
93 bgs, A Hurst & Co, Coldbrook, Pernambuco
34 bgs, C W Jacob & Allison, Coldbrook, Pernambuco
169 bgs, Strohmeyer & Arpe Co, Coldbrook, Pernambuco
203 bgs, Smith & Nichols, Coldbrook, Pernambuco
34 bgs, Strahl & Pitsch, Coldbrook, Pernambuco
MINERAL—20 bgs, 2,288 lbs, Schliemann & Co, Deutschland, Hamburg
MONTAN—25 bgs, 2,820 lbs, C W Jacob & Allison, Deutschland, Hamburg
600 bgs, 92,400 lbs, Strohmeyer & Arpe Co, Deutschland, Hamburg
40 bgs, 4,514 lbs, Smith & Nichols, Deutschland, Hamburg
WAX, OZOKERITE—50 bgs, Strohmeyer & Arpe Co, Saturnia, Trieste
40 bgs, Smith & Nichols, Saturnia, Trieste
25 bgs, A Klipstein & Co, Saturnia, Trieste
SPERMACETTI—400 cs, Transylvania, Glasgow
WHITING—200 bgs, 44,000 lbs, Whittaker-Clark & Daniels, Black Gull, Antwerp
WOODFLOUR — 910 bgs, Stavangerfjord, Fredrikstad
500 bgs, State Chem Co, Statendam, Rotterdam
YEAST—26 crts, 4 cs, Deutschland, Hamburg
PASTE—150 cs, 19,140 lbs, W J Honan, Deutschland, Hamburg
ZINC, CHLORIDE, POWD—20 cks, 11,532 lbs, Black Gull, Antwerp
OXIDE—3 cks, Yardley & Co, American Trader, London
125 bbls, American Cyanamid & Chem Co, President Adams, Marseilles
45 bgs, Reichard-Coulston, Inc, Antonia, Liverpool
SULPHIDE—1 ck, Claudius Ash Sons & Co, American Trader, London

New York Transit Imports

CADMIUM—20 cs, Black Gull, Antwerp, Chicago
GELATIN—2 cs, American Express Co, Europa, Bremen, Rochester
PAPRIKA—25 bgs, Central United Natl Bank, President Harding, Hamburg, Cleveland
PEPPER, BLACK—250 bgs, Union Trust Co, Siamese Prince, Oosthaven, Cleveland
SPONGES—5 bls, Munargo, Nassau, Amsterdam
19 bls, Munargo, Nassau, Belgium
74 bls, Munargo, Nassau, Havre
27 bls, Munargo, Nassau, Rotterdam
34 bls, Munargo, Nassau, London
53 bls, Munargo, Nassau, Hamburg
4 bls, Munargo, Nassau, Japan
6 bls, Munargo, Nassau, Stockholm
WASTE—2 bls, Munargo, Nassau, Amsterdam
9 bls, Munargo, Nassau, Belgium
22 bls, Munargo, Nassau, Havre
6 bls, Munargo, Nassau, Rotterdam
31 bls, Munargo, Nassau, Hamburg
21 bls, Munargo, Nassau, Japan
WHALE MEAL—6 bbls, Darling & Co, Stavengerfjord, Oslo, Chicago

Baltimore Imports

ALUMINUM POWDER—11 cs, Baltimore & Ohio R R Co, City of Havre, Bremen
AMMONIA SULPHATE—286 tons, Boschdijk, Rotterdam
BRONZE POWDER—5 dms, American Express Co, City of Havre, Bremen
CALCIUM NITRATE—895 tons, and 3,000 bgs, Synthetic Nitrogen Products Corp, Ankara, Porsgrunn
CHEMICALS—20 cks, City of Havre, Hamburg
85 cks, 80 bbls, Brown Bros, Harriman & Co, City of Havre, Hamburg
80 cks, Advance Solvents & Chemical Co, City of Havre, Hamburg
353 bgs, F H Shallus & Co, City of Havre, Hamburg
6 cks, Synthetic Nitrogen Products Corp, Ankara, Porsbrunn
150 dms, Advance Solvents & Chemical Co, Boschdijk, Rotterdam
CHINA CLAY, CRUDE—180 tons, Mahsud, Calcutta
CLAY, BLUE—60 cks, Boschdijk, Rotterdam
CRYOLITE, SYN—194 cks, Ch Hardy, Inc, City of Havre, Havre
EPSOM SALT—135 cks, City of Havre, Bremen
GLASS DUST—15 cs, 5,526 lbs, Oroline Products Co, City of Havre, Hamburg
HERBS, MEDICINAL—5 bls, City of Havre, Havre
OIL, FUEL—37,400 bbls, Mexican Petroleum Corp, Allan Jackson, Aruba
LUBRICATING—32 dms, City of Havre, Hamburg
PAINT, DRY—6 cks, A C Rempert & Co, City of Havre, Hamburg
PETROLEUM, CRUDE—8,600 bbls, Mexican Petroleum Corp, Allan Jackson, Aruba
100,769 bbls, Standard Oil Co of New Jersey, J A Moffett, Jr, Las Piedras
2,781,941 gls, Mexican Petroleum Corp, Harold Walker, Tampico
SILICOMANGANESE—110 cs, Boschdijk, Rotterdam
STARCH, POTATO—100 bgs, Stein, Hall & Co, Inc, Boschdijk, Rotterdam
TIN POWDER—4 cs, American Express Co, City of Havre, Bremen
UREA—242 bgs, Synthetic Nitrogen Products Corp, Boschdijk, Rotterdam
WAX, MONTAN—67 bgs, City of Havre, Hamburg

Boston Imports

AMMONIAC, SAL—37 cks, 23,003 lbs, Cold Harbor, Hamburg
ASPHALT—40 bgs, United Naval Stores Co, Inc, La Perla, Havana
BONE MEAL—1,375 bgs, 139,538 lbs, Cold Harbor, Hamburg
CARBON, DECOLORIZING—300 bgs, 30,952 lbs, Durkee Famous Foods, Inc, West Eldara, Rotterdam
CHEMICALS — 15 cks, 9,672 lbs, Irving M Sobin Co, West Eldara, Rotterdam
15 cks, 11,936 lbs, West Eldara, Rotterdam
COCOA BUTTER—5 cs, 694 lbs, Stephen L Bartlett Co, West Eldara, Rotterdam
COCONUT, DESIC—250 cs, General Food Sales, Tai Ping Yang, Manila
GLASS, PLATE—18 cs, 57,694 lbs, Karas & Karas Glass Co, Black Gull, Antwerp
GLUE, BONE, GRD—60 bgs, 6,601 lbs, Cold Harbor, Hamburg
GLUESTOCK—174 bgs, Chase National Bank, City of Roubaix, Bombay
FISH—70 bgs, 2 bbls, Rogers Isinglass & Glue Co, Yarmouth, Yarmouth
3 bbls, J R Poole Co, Yarmouth, Yarmouth
2 bbls, John Nagle, Yarmouth, Yarmouth
GLYCERIN — 20 dms, 26,246 lbs, Garrigues, Stewart & Davies, Inc, Black Gull, Antwerp
50 dms, 64,066 lbs, Irving M Sobin Co, West Eldara, Rotterdam
GUM, ARABIC—50 bgs, 11,113 lbs, T M Duche & Sons, Sianter, Port Sudan
TRAGACANTH—42 bgs, 7,562 lbs, Arnold-Hoffman Co, Cold Harbor, London
MEDICINAL PREPS—6 cs, 3 bskts, Quong Wah Lung, Tai Ping Yang, Hongkong
MICA—2 cs, City of Roubaix, Calcutta
MUSTARD SEED—150 bgs, 33,069 lbs, West Eldara, Rotterdam
50 bgs, 11,023 lbs, D & L Slade Co, West Eldara, Rotterdam
MYROBALANS—800 bgs, City of Roubaix, Bombay
OIL, CODLIVER—25 dms, Cold Harbor, Hamburg
FUEL—67,500 bbls, Mexican Petroleum Corpn, Dean Emery, Aruba
66,950 bbls, Mexican Petroleum Corpn, William Green, Aruba
LUBRICATING—45 dms, 20,942 lbs, Webbal Services Co, Black Gull, Antwerp
35 bbls, Black Gull, Antwerp
MEDICINAL—100 dms, 48,819 lbs, Cold Harbor, Hamburg
PEANUT—5 dms, 2,473 lbs, Lamont Corliss Co, West Eldara, Rotterdam
PEPPER—85 bgs, Siantar, Oosthaven
WHITE—250 bgs, Siantar, Batavia
PHOSPHATE, PRECIP—500 bgs, 100,993 lbs, Black Gull, Antwerp
POTASH CARBONATE—23 cks, 23,497 lbs, Innis, Speiden & Co, West Eldara, Rotterdam
MURIATE—200,619 lbs, N V Potash Export My, Black Gull, Antwerp
SULPHATE—500 bgs, 99,999 lbs, N V Potash Export My, Black Gull, Antwerp
SAFROL—7 dms, Mitsui & Co, Tai Ping Yang, Kobe
SESAME SEED—6 bdls, Quong Wah Lung, Tai Ping Yang, Hongkong
SHELLAC—25 cs, 5,906 lbs, West Eldara, Rotterdam
25 bgs, Banca Commerciale Italiana Trust Co, City of Roubaix, Calcutta
SODA CYANIDE—50 dms, 5,485 lbs, Stone & Downer, West Eldara, Rotterdam
STARCH, POTATO—250 bgs, 55,115 lbs, Stein, Hall & Co, West Eldara, Rotterdam
250 bgs, 55,115 lbs, Arnold-Hoffman Co, West Eldara, Rotterdam
TAPIOCA, FLAKE SIFTINGS—351 bgs, National City Bank, Siantar, Sourabaya
FLOUR—2,739 bgs, National City Bank, Siantar, Sourabaya
WAX, MONTAN, CRUDE—134 bgs, 22,156 lbs, Cold Harbor, Hamburg

Boston Transit Imports

GLUE, HIDE—1 bg, 110 lbs, West Eldara, Rotterdam, Framingham

Claymont Imports

PETROLEUM, CRUDE—62,481 bbls, The Texas Co, Dungannon, Tampico
PYRITES ORE—6,840 tons, Pyrites Co, Mar Nergo, Huelva

Galveston Imports

PEAT MOSS—740 bls, Nishmaha, Bremen

Houston Imports

ACID, CRESYLIC—90 dms, Binnendijk, Antwerp
CANARY SEED—26 bgs, Binnendijk, Rotterdam
CARAWAY SEED—15 bgs, Binnendijk, Rotterdam
CHEMICALS—10 cks, Binnendijk, Rotterdam
COPPERAS—500 bgs, Binnendijk, Antwerp
FLAXSEED—1 bg, Binnendijk, Rotterdam
HEMPSEED—6 bgs, Binnendijk, Rotterdam
RAPESEED—6 bgs, Binnendijk, Rotterdam
SALTCAKE, CRUDE, WHITE—536 tons, Sapinero, Barcelona
SUNFLOWER SEED—10 bgs, Binnendijk, Rotterdam

Los Angeles Imports

AMMONIA SILICOFLUORIDE—5 cks, 2,210 lbs, Damsterdijk, Rotterdam
SULPHATE—4,000 bgs, 400,000 lbs, Gertrude Maersk, Osaka
4,000 bgs, 398,720 lbs, Nasusan, Tokio
BLEACHING POWDER—63 pkgs, 18,630 lbs, Donau, Frankfort
BLOOD, DRIED—2,218 bgs, 227,230 lbs, Transshipped, Auckland
CHEMICALS—10 cs, 370 lbs, Kurama, Yokohama
COALTAR DISTILLATE—36 pkgs, 1,980 lbs, Transshipped, London
COPRA MEAL—1,120 sx, 112,000 lbs, Kota Inten, Manila
EPSOM SALT—300 bgs, 32,760 lbs, Donau, Berlin
FERTILIZER—1,000 bgs, 100,000 lbs, Nasusan, Yokohama
NITRATE-PHOSPHATE — 1,000 bgs, 99,900 lbs, Kurama, Kobe
GUM, COPAL—65 bskts, 11,530 lbs, Transshipped, Macassar
HEMPSEED MEAL—2,000 bgs, 200,000 lbs, Florida, Kobe
LINSEED MEAL—2,000 bgs, 1,000 pkgs, 300,000 lbs, Nasugan, Kobe
MUSTARD SEED—500 lbs, Damsterdijk, Enkhuizen
NUTMEG—20 pkgs, 4,000 lbs, Transshipped, Grenada
OIL, CHINAWOOD—138 dms, Florida, Hankow
WHITE MINERAL—25 dms, Donau, Hamburg
PEPPER—140 pkgs, 19,600 lbs, Kota Inten, Alleppey
POPPYSEED—50 bgs, 5,450 lbs, Damsterdijk, Rotterdam
POTASH, CAUSTIC—30 dms, 10,130 lbs, Donau, Berlin
SOAP POWDER—1 pkg, 410 lbs, Donau, Hamburg
TOILET—8 cs, 1,250 lbs, Wyoming, Paris
2 cs, 180 lbs, Transshipped, London
SULPHUR—1,135,340 lbs, Capac, Antofagasta
TOILET PREPS—50 lbs, Wyoming, Paris

Mobile Imports

BAUXITE ORE—2,851 tons, Vestvangen, Paramaribo

New Orleans Imports

AMMONIA SULPHATE—1,100 tons, Armour Fertilizer Works, Duquesne, Rotterdam
50 tons, Swift & Co, Duquesne, Rotterdam
CALCIUM CARBIDE—110 dms, Munson Line, Duquesne, Antwerp
CANARY SEED—1,329 sx, Delmundo, Buenos Aires
10 sx, Catz American Co, Duquesne, Rotterdam
CETYLENE — 1 cs, Shell Petroleum Corp, Duquesne, Rotterdam
CHEMICALS—256 dms, Thompson Hayward Chemical Co, Duquesne, Rotterdam
50 cks, Bartlett Chemical Co, Duquesne, Rotterdam
100 cks, Brown Bros, Harriman & Co, Duquesne, Rotterdam
COCONUTS—100 sx, L LeBon, Lindvangen, Georgetown
100 sx, Lindvangen, Georgetown
COPRA—2,500 tons, Volunteer, Cebu

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GINGER ROOT—40 sx, Lindvangen, Georgetown
GLAUBER'S SALT—1,025,435 kilos, Bank of Manhattan, San Diego, Antwerp
1 lot, Elisabeth Van Belgie, Antwerp
GUM, CHICLE—252 bgs, Goodman & Beer, Munplace, Progreso
OIL, COCONUT—718 tons, Volunteer, Manila
LUBRICATING—10 dms, Welbal Services, San Diego, Antwerp
PIMENTO—250 sx, Lindvangen, Kingston
POPPYSEED—300 sx, Western Brokerage Co, Duquesne, Rotterdam
SODA SILICOFLUORIDE—20 cks, Duquesne, Rotterdam
TALC—5 ctns, 1 bl, M Friedman, Tivives, Havana
UREA—200 sx, Synthetic Nitrogen Products Co, Duquesne, Rotterdam

Norfolk Imports

CHEMICALS—200 bgs, 18 tons, Brown Bros, Harriman & Co, City of Newport News, Hamburg
CHINA CLAY—1,289 tons, Paper Makers Importing Co, Dunoff Head, Fowey
CLAY, BALL—283 tons, Paper Makers Importing Co, Dunoff Head, Fowey
GLAUBER'S SALT—125 cks, 25 tons, City of Havre, Hamburg
150 cks, 30 tons, Charles H Stone, City of Norfolk, Hamburg
POTASH MURIATE—1,486 bgs, 138 tons, City of Norfolk, Hamburg
500 bgs, 48 tons, City of Newport News, Hamburg
SALTPETER—89 tons, F W Berk & Co, Leihigh, Hamburg
SODA SULPHIDE—25 dms, 3 tons, City of Newport News, Hamburg

Philadelphia Imports

ALCOHOL, SULPHONATED—237 cks, E I du Pont de Nemours & Co, Haimon, Hamburg
AMMONIAC, SAL—20 cks, Cold Harbor, Hamburg
CHALK, CRUDE—268,000 kilos, Philadelphia Whitting Works, Dungannon, Tampico
CHEMICALS—100 bgs, 125 cks, Haimon, Bremen
CLAY—55 tons, 60 bgs, United Clay Mines Corp, Sea Victory, Bristol
BOND—55,000 kilos, Cold Harbor, Hamburg
ETHYLENE DIBROMIDE—37 cks, E K Howe & Sons, Haimon, Hamburg
FIRECLAY—114,000 kilos, Cold Harbor, Hamburg
FLUORSPAR—2,480 bgs, O Hommel Co, Maria, Venice
FULLER'S EARTH—400 bgs, L A Salomon & Bro, Cold Harbor, London
GLYCERIN—105 cs, Chr Sass, Marseilles
LEAD ACETATE—45 cks, Cold Harbor, Hamburg
MAGNESITE, CALC—400 bgs, Examelia, Salonica
MANGANESE ORE—4,200 tons, Cuban American Manganese Co, Thuhaug, Santiago
MENTHOL—10 cks, Bankers Trust Co, Sanyo, Kobe
MUSTARD SEED, YELLOW—50 bgs, Haimon, Bremen
NAPHTHALENE—279 bgs, The Barrett Co, Sea Victory, Bristol
CRUDE—500 bgs, Cold Harbor, London
OIL—75 dms, Atlantic Refining Co, Independence Hall, Havre
1 cs, Morris Friedman, Maria, Naples
CODLIVER—100 cks, Cold Harbor, Hamburg
CODLIVER, MED—10 bbls, Cold Harbor, Hamburg
CODLIVER, POULTRY—100 dms, Cold Harbor, Hamburg
LUBRICATING—20 dms, Scanyork, Copenhagen
MINERAL—25 dms, Cold Harbor, Hamburg
OLIVE—5 cks, Examelia, Marseilles
1 cs, 3 cks, American Shipping Co, Examelia, Palermo
2 bbls, Antonio Pitah, Examelia, Messina
100 cs, Examelia, Leghorn
300 cks, Livenza, Leghorn
250 cs, Chr Sass, Genoa
75 dms, Manufacturers Trust Co, Chr Sass, Algiers
OLIVE, FOOTS—50 bbls, Livenza, Palermo
OLIVE, SULPH—100 bbls, Brown Bros Harriman & Co, Maria, Palermo
60 bbls, Examelia, Messina
400 bbls, Examelia, Milazzo
PERILLA—231 tons, Sanyo, Dairen
RAPESEED, CRUDE—283 tons, Standard Vacuum Corp, Antago, Kobe
PAINT—1 cs, J W Hampton Jr & Co, Sea Victory, Bristol
PEAT MOSS—543 bls, Blankaholm, Gothenburg
750 bls, Haimon, Bremen
PETROLEUM, CRUDE—110,489 bbls, Gulf Refining Co, Gulfhawk, Las Piedras
PLASTER PARIS—330 bgs, Haimon, Bremen
POTASH, CAUSTIC—17 dms, Haimon, Hamburg
PYRIDIN—1 cs, J W Hampton Jr & Co, Sea Victory, Bristol
RED OXIDE—245 bbls, F B Vandegrift & Co, Examelia, Malaga
SHELLAC—100 bgs, Weirbank, Calcutta
SILICOMANGANESE — 110 cs, Blankaholm, Gothenburg
SOAP, COMMON—100 cs, C H Blittersdorf, Maria, Trieste
SODA FLUORIDE—25 cks, Pfaltz & Bauer Co, Cold Harbor, Bremen
TALC, POWD—75 bgs, Examelia, Leghorn
TANNING EXTRACT—400 bgs, Tanning Corp, Haimon, Hamburg
VARNISH—1 cs, Allen Forwarding Co, Sea Victory, Bristol
WATER, MINERAL—120 cs, E & J Burke, Ltd, Chr Sass, Marseilles
WAX, MINERAL—34 bgs, Maria, Trieste

San Francisco Imports

ACID, CITRIC—84 cs, Hawaiian Pineapple Co, Ltd, Malolo, Honolulu
AGAR AGAR—13 bls, Mitsui & Co, Ltd, Toyokawa, Kobe
10 bls, S B Penick & Co, Inc, Toyokawa, Kobe
10 bls, Consumers Import Co, Inc, Toyokawa, Kobe
10 bls, Wood & Selleck, Inc, Toyokawa, Kobe
10 bls, W Benkert & Co, Inc, Toyokawa, Kobe
50 bls, T M Duche & Sons, Inc, Toyokawa, Kobe
10 bls, Importers Commission Co, Inc, Toyokawa, Kobe
ALBUMEN, EGG, DUCK—54 cs, Central Hanover Bank & Trust Co, President Coolidge, Shanghai
AMMONIA SULPHATE—2,000 bgs, Mitsui & Co, Ltd, Toyokawa, Kobe
ARSENIC, WHITE—250 cs, Balfour, Guthrie & Co, Ltd, Toyokawa, Kobe
BEESWAX—9 cs, Manukai, Ahukini
20 cs, Manoa, Kahului
BONES, GRAN—10,383 bgs, Wilson & Co, West Nilus, Buenos Aires
BRISTLES—6 cs, Frederick H Cone & Co, Inc, Florida, Kobe
BRUSHES—7 cs, George Borgfeld & Co, President Coolidge, Kobe
CAMPHOR, REFD—11 cs, Mitsui & Co, Ltd, Toyokawa, Kobe
75 cs, Mitsui & Co, Ltd, Handicap, Kobe
CANARY SEED—411 bgs, Bank of California, N A, West Nilus, Buenos Aires
400 bgs, C M Volkman & Co, West Nilus, Buenos Aires
CASEIN—10 bgs, West Nilus, Buenos Aires
CASSIA—2 bls, R L Kritzler, President Coolidge, Hongkong
BUDS—25 bls, M L Van Norden, President Coolidge, Hongkong
CHILLIES—56 bgs, First National Bank of Boston, Toyokawa, Kobe
40 bgs, Stickney & Poore Spice Co, Handicap, Kobe
60 bgs, Pacific Orient Co, Handicap, Kobe
HONTAKA—112 bgs, American Spice Mill, Inc, Toyokawa, Kobe
100 bgs, Gale T German, Toyokawa, Kobe
CINNAMON, QUILLS—100 bls, D Hecht & Co, President Coolidge, Hongkong
150 bls, McKesson & Robbins, Inc, President Coolidge, Hongkong
COCOA BEANS—400 bgs, Loch Katrine, Rotterdam
300 bgs, Vandel Commercial Co, Ltd, West Nilus, Bahia
650 bgs, W T Pidwell Co, West Nilus, Bahia
100 bgs, West Nilus, Trinidad
COCOUT, DESIC—200 cs, Bank of America, President Coolidge, Manila
50 cs, President Coolidge, Manila
1,513 cs, Durkee Famous Foods, Inc, President Coolidge, Manila
700 cs, Wood & Selick, Inc, President Coolidge, Manila
5,448 cs, The Franklin Baker Co, President Coolidge, Manila
1,365 cs, Philippine Desiccated Cocoanut Corpn, President Coolidge, Manila
COPRA—510 tons, The Best Foods, Inc, Nansenville, Cebu
12,999 bgs, Nansenville, Macassar
210 tons, Durkee Famous Foods, Inc, Nansenville, Cebu
44 sks, The Best Foods, Inc, Manini, Ahukini
MEAL—4,480 bgs, Pacific Vegetable Oil Co, Inc, Florida, Kobe
FLAXSEED—3,300 bgs, Pacific Vegetable Oil Co, Inc, West Nilus, Buenos Aires
GINGER ROOT—30 bgs, Gale T German, Toyokawa, Kobe
8 cs, Sing Chong Co, President Coolidge, Hongkong
10 cs, Wo Kee Co, President Coolidge, Hongkong
10 cs, Kwong Yick, President Coolidge, Hongkong
29 cs, Kwong Lee & Co, President Coolidge, Hongkong
7 cs, Wing Chong Co, President Coolidge, Hongkong
5 cs, Wing Lee Chong, President Coolidge, Hongkong
10 cs, Him Sing Chong, President Coolidge, Hongkong
10 cs, Fung Chong, President Coolidge, Hongkong
10 cs, Shun Yuen Hing, President Coolidge, Hongkong
10 cs, Sui Lee & Co, President Coolidge, Hongkong
10 cs, Shun On, President Coolidge, Hongkong
GLUESTOCK—250 bls, Wilson & Co, West Nilus, Buenos Aires
GUM, COPAL—50 bgs, Henry W Peabody & Co, Kota Inten, Singapore
HERBS, DRIED—22 cs, Shew Hing Lung, President Coolidge, Hongkong
2 bskts, Shun On, President Coolidge, Hongkong
INK—5 cs, Shun On, President Coolidge, Hongkong
1 cs, President Coolidge, Yokohama
7 dms, California Ink Co, Inc, Mana, Honolulu
LINSEED MEAL—600 bgs, Hitsui & Co, Ltd, Handicap, Kobe
LYE WATER—3 cs, Shun On, President Coolidge, Hongkong
MANIOC MEAL—1,464 bgs, Maintz Productenhandel, N V, Nansenville, Sourabaya
MEDICINAL PREPS—53 pkgs, Bow Tai Wo Co, President Coolidge, Hongkong
12 cs, Kwong Yick, President Coolidge, Hongkong
2 cs, Shew Hing Lung, President Coolidge, Hongkong
1 cs, Wing Hing Chong, President Coolidge, Hongkong
16 pkgs, Chong Jee Tong, President Coolidge, Hongkong
6 cs, Shun On, President Coolidge, Hongkong
MENTHOL—15 cs, Ungerer & Co, Inc, Toyokawa, Kobe
20 cs, Bridges Neumer & Co, Inc, Toyokawa, Kobe
MOLASSES—500 tons, Mala, Nana
NUTGALLS—160 bgs, K Mertig, President Coolidge, Shanghai
NUTMEGS—8 bgs, Nansenville, Singapore
OIL, CAMPHOR—5 pkgs, James B. Horner, Inc, Toyokawa, Kobe
CHINAWOOD—606 tons, The Werner G Smith Co, President Coolidge, Shanghai
COD, PALE—30 dms, Irving R Boody & Co, Inc, Toyokawa, Kobe
FISH, HYDR—200 bgs, Otis, McAllister & Co, Toyokawa, Yokahama
600 bgs, Otis, McAllister & Co, Toyokawa, Kobe
LUBRICATING—1 cs, Associated Oil Co, President Coolidge, Shanghai
PAINT—1 cs, President Coolidge, Hongkong
PALM—514 tons, United Africa Co, Inc, Nansenville, Belawan
PEANUT—60 cs, Him Sing Chong, President Coolidge, Hongkong
50 cs, Shun Yuen Hing, President Coolidge, Hongkong
45 cs, Shun On, President Coolidge, Hongkong
PERILLA—300 dms, S L Jones & Co, Inc, Florida, Kobe
97 dms, Mitsui & Co, Ltd, Handicap, Kobe
SESAME—10 cs, Kwong Yick, President Coolidge, Hongkong
5 cs, Kwong Lee & Co, President Coolidge, Hongkong
PAINT, TIRE—1 pkg, Atholl McLean, Loch Katrine, London
PEAT MOSS—150 bls, Inouye & Co, Handicap, Kobe
PEPPER—480 bgs, Volkart Bros, Inc, Kota Inten, Alleppy
240 bgs, Kota Inten, Alleppy
QUEBRACHO EXTRACT—415 bgs, International Products Corpn, West Nilus, Buenos Aires
RAPESEED—1,332 bgs, Arthur G Dunn, Handicap, Kobe
SESAME SEED—5,356 bgs, Hongkong & Shanghai Banking Corpn, Florida, Shanghai
SHELLAC—25 bgs, American Trust Co, Kota Inten, Calcutta
214 bgs, Kota Inten, Calcutta
STARCH—15 cs, Fung Chong, President Coolidge, Hongkong
5 cs, Yee Wo, President Coolidge, Hongkong
20 cs, Shun On, President Coolidge, Hongkong
TALLOW—100 dms, Nanukai, Honolulu
7 bbls, Mana, Kahului
TAPIOCA, SEED—55 bgs, Catz American Co, Inc, Nansenville, Batavia
TOILET PREPS—2 cs, Malolo, Honolulu
2 cs, Manoa, Honolulu
VACCINE—8 cs, West Nilus, Buenos Aires
WAX, VEGETABLE—200 cs, Mitsui & Co, Ltd, Toyokawa, Kobe

Tampa Imports

GUANO, CHILEAN—500 tons, Arnold Maersk, Tocopilla

Recent Exports from U. S. Ports

New York Exports

ACID, BATTERY — (Silveryew) 2,306 lbs, Manila
CITRIC—(Coamo) 325 lbs, San Juan
MURIATIC—(Ponce) 24,000 lbs, Fajardo
SULPHURIC—(Coampo) 6,604 lbs, San Juan
AMYL ACETATE—(Collingsworth) 14,615 lbs, Rio Janeiro
ASPHALT—(Excalibur) 41,810 lbs, Marseilles; (Savoia) 164,265 lbs, Genoa; (Bilderdijk) 172,681 lbs, Rotterdam; (Black Hawk) 68,538 lbs, Antwerp; (New York) 31,894 lbs, Hamburg; (Collingsworth) 99,979 lbs, Buenos Aires
SOLID—(Daytonian) 45,552 lbs, Manchester
BENZENE—(Hoyeisan) 12,595 gls, Yokohama; (Silveryew) 35,475 gls, Osaka
BITUMEN—(Savoia), 859,511 lbs, Milan
BLOOD, DRIED—(Scanmail) 44,660 lbs, Helsingfors
CHEMICALS—(Augustus) 4,887 lbs, Genoa
CHROME ALUM—(Colombia) 1,540 lbs, Cartagena
COALTAR PITCH — (Haiti) 1,125 lbs, Port Prince
COPRA CAKE—(New York) 336,270 lbs, Hamburg
CORN SUGAR —(Hoyeisan) 6,060 lbs, Osaka or Kobe
SYRUP—(Morro Castle) 26,254 lbs, Havana; (Daytonian), 45,600 lbs, Manchester; (Fairfield), 22,897 lbs, Havana; (Ponce) 3,763 lbs, Ponce; (Caledonia), 45,996 lbs, Glasgow
CORNFLOUR—(Morro Castle) 7,050 lbs, Havana; (Silveryew) 15,565 lbs, Cebu; (New York) 18,100 lbs, Funchal; (City of Evansville) 124,080 lbs, Shanghai; 59,220 lbs, Manila
DAMIANA LEAVES—(New York) 1,133 lbs, Hamburg
DEXTRIN—(Collingsworth) 7,070 lbs, Buenos Aires
CORN—(Bilderdijk) 14,200 lbs, Rotterdam; (Daytonian) 28,400 lbs, Manchester
DYES — (Excalibur) 2,128 lbs, Marseilles; (Hoyeisan) 239,134 lbs, Yokohama; (Haiti) 2,508 lbs, Porto Colombia; (Black Hawk) 4,010 lbs, Antwerp; (Collingsworth) 1,903 lbs, Buenos Aires; (City of Evansville) 33,402 lbs, Shanghai; 38,850 lbs, Tsingtao; (Southern Cross) 2,710 lbs, Santos; 4,998 lbs, Buenos Aires
FERTILIZER—(Quirigua) 137,615 lbs, Port Limon; (Ponce) 150,000 lbs, Guanica
FLOTATION REAGENT — (Silveryew) 16,200 lbs, Yokohama
GASOLINE—(West Kebar) 550 gls, Freetown; 3,000 gls, Monrovia; 7,000 gls, Accra; 500 gls, Lome; 15,300 gls, Port Harcourt; 5,000 gls, Calabar; (Cubano) 32,000 gls, Bahia; 5,000 gls, Rio de Janeiro; 10,000 gls, Santos; (Collingsworth) 30,000 gls, Montevideo; 5,000 gls, Rio de Janeiro
GLUCOSE—(Daytonian) 11,506 lbs, Manchester
GLUE, DRY—(Bilderdijk) 10,284 lbs, Amsterdam
GREASE, ANIMAL—(Atlanta) 13,659 lbs, Bari
CUP—(Santa Rosa) 21,326 lbs, Cartagena
LUBRICATING—(Scanpenn) 23,394 lbs, Copenhagen; (Exermont) 2,985 lbs, Casablanca; (Paris) 18,410 lbs, Havre; (West Kebar) 2,030 lbs, Dakar; 780 lbs, Lome; 2,510 lbs, Duala; (Excalibur) 16,270 lbs, Marseilles; 2,337 lbs, Marsala; 1,411 lbs, Alexandria; (Metapan) 6,816 lbs, La Libertad; 8,460 lbs, La Union; 1,027 lbs, Santa Marta; (Savoia) 10,741 lbs, Genoa; 2,467 lbs, Leghorn; 2,390 lbs, Naples; (Hoyeisan) 26,479 lbs, Yokohama; (Silveryew) 63,730 lbs, Kobe; 15,336 lbs, Hongkong; 15,377 lbs, Iloilo; 790 lbs, Cebu; (City of Oran) 37,662 lbs, Calcutta; 11,845 lbs, Karachi; 44,262 lbs, Madras; (Liberty) 2,999 lbs, Paris; 650 lbs, Havre; (Tai Yang) 44,615 lbs, Shanghai; (Adriatic) 53,839 lbs, Liverpool; (Collingsworth) 4,439 lbs, Rio Janeiro; 26,404 lbs, Santos; (Caledonia) 42,628 lbs, Glasgow; (Rochambeau) 23,272 lbs, Havre; (Southern Cross) 974 lbs, Buenos Aires
INSECTICIDE—(Exermont) 48,471 lbs, Oran; 11,801 lbs, Philippsville; 11,967 lbs, Bone; 6,825 lbs, Tunis; (Vulcania) 7,980 lbs, Piraeus; (Excalibur) 1,435 lbs, Jaffa; (New York) 4,200 lbs, Oslo; (Tai Yang) 5,820 lbs, Tientsin; 18,600 lbs, Shanghai; (Adriatic) 13,600 lbs, Liverpool; (Caledonia) 5,946 lbs, Glasgow
IRON OXIDE—(Cubano) 7,456 lbs, Buenos Aires; (New York) 4,216 lbs, Hamburg; (Collingsworth) 2,416 lbs, Buenos Aires; (Southern Cross) 2,520 lbs, Buenos Aires
KEROSENE—(West Kebar) 3,000 gls, Keta; 7,000 gls, Accra; 2,500 gls, Freetown
LACQUER—(Cubano) 4,440 lbs, Buenos Aires; (Liberty) 520 lbs, Havre; (Western World) 1,892 lbs, Santos
LARD—(Scanpenn) 9,005 lbs, Copenhagen; (Paris) 160,540 lbs, Havre; 6,742 lbs, Bordeaux; (Augustus) 68,325 lbs, Naples; 9,337 lbs, Messina; (Atlanta) 25,001 lbs, Trieste; 15,500 lbs, Fiume; (Scanmail) 22,578 lbs, Copenhagen or Oslo; 23,257 lbs, Helsingborg; 31,250 lbs, Helsingfors; (West Kebar) 10,015 lbs, Santa Cruz; (Excalibur) 11,884 lbs, Marseilles; (Bilderdijk) 173,660 lbs, Rotterdam; 62,000 lbs, Amsterdam; 11,290 lbs, Karlesruhe; (Liberty) 63,658 lbs, Havre; 76,593 lbs, Bordeaux; (Daytonian) 138,888 lbs, Manchester; (Black Hawk) 251,724 lbs, Antwerp; (New York) 382,928 lbs, Hamburg; 43,225 lbs, Viipuri; 6,225 lbs, Stettin; 9,275 lbs, Koenigsburg; (Coamo) 12,400 lbs, San Juan; (Adriatic) 447,295 lbs, Liverpool; (Ponce) 10,858 lbs, San Juan; 6,200 lbs, Guanica; (Leviathan) 80,838 lbs, Southampton; (Caledonia) 117,422 lbs, Glasgow; (Majestic) 135,498 lbs, Southampton
LEAD, WHITE—(Bilderdijk) 59,077 lbs, Amsterdam; (Southern Cross) 1,254 lbs, Buenos Aires
LIME, PHOSPHATE—(Silveryew) 5,400 lbs, Yokohama
LINSEED CAKE—(Black Hawk) 901,787 lbs, Antwerp; (New York) 680,705 lbs, Hamburg
LITHARGE—(Fairfield) 2,277 lbs, Havana
NAPHTHA—(West Kebar) 13,250 gls, Dakar; 9,000 gls, Port Bouet; 17,750 gls, Takoradi; 17,000 gls, Accra; 10,000 gls, Keta; 5,500 gls, Lome; 30,000 gls, Lagos; 10,000 gls, Port Harcourt; 5,000 gls, Duala; (Collingsworth) 10,000 gls, Santos
COCONUT—(Colombia), 11,863 lbs, Port Prince
COPRA—(Hoyeisan) 10,200 lbs, Yokohama or Kobe
COTTONSEED—(New York) 6,200 lbs, Hamburg
CYLINDER—(Winnebago) 470,400 gls, Manchester; (Varg) 211,596 gls, Manchester
EDIBLE—(Ponce) 12,390 lbs, San Juan; (Solhavn) 4,719 lbs, Porto Plata
FISH—(Liberty) 7,403 lbs, Bordeaux
OIL, BURNING—(Winnebago) 111,250 gls, Manchester
LUBRICATING—(Scanpenn) 840 gls, Copenhagen; (Exermont) 7,700 gls, Casablanca; 1,100 gls, Ceuta; 4,510 gls, Melilla; 1,050 gls, Oran; 1,764 gls, Tunis; (Winnebago) 197,736 gls, Manchester; (Paris) 19,152 gls, Havre; (Augustus) 15,750 gls, Genoa; (Atlanta) 4,536 gls, Trieste; 13,230 gls, Fiume; (Vulcania) 12,870 gls, Naples; (Scanmail) 1,045 gls, Copenhagen; (West Kebar) 5,256 gls, Santa Cruz; 3,300 gls, Dakar; 1,100 gls, Monrovia; 550 gls, Grand Bassam; 5,500 gls, Saltpond; 5,500 gls, Accra; 2,750 gls, Keta; 3,130 gls, Lome; 2,650 gls, Lagos; 13,315 gls, Port Harcourt; 3,050 gls, Calabar; 1,650 gls, Duala; (Excalibur) 7,770 gls, Marseilles; 840 gls, Bone; 630 gls, Marseilles; 1,470 gls, Naples; 330 gls, Alexandria; 1,540 gls, Cairo; 2,475 gls, Jaffa; (Morro Castle) 550 gls, Havana; (Quirigua) 715 gls, Guayaquil; (Metapan) 500 gls, Valparaiso; 2,620 gls, La Union; 825 gls, Cristobal; 1,100 gls, Panama City; 440 gls, Puntarenas; 450 gls, Porto Colombia; 2,530 gls, Santa Marta; (Savoia) 29,484 gls, Genoa; 210 gls, Leghorn; 630 gls, Naples; (Cubano) 610 gls, Bahia; 4,410 gls, Rio Janeiro; 252 gls, Sao Francisco; 2,478 gls, Santos; 2,612 gls, Rio Grande; 4,455 gls, Buenos Aires; (Hoyeisan) 5,500 gls, Kobe; (Bilderdijk) 10,290 gls, Rotterdam; 2,555 gls, Amsterdam; (Morro Castle) 6,080 gls, Havana; 550 gls, Shanghai; 30,525 gls, Hongkong; 6,925 gls, Iloilo; 1,675 gls, Cebu; (Panuco) 1,375 gls, Progreso; 5,225 gls, Tampico; (City of Oran) 1,660 gls, Mombasa; 7,000 gls, Bombay; 64,900 gls, Calcutta; 7,425 gls, Karachi; 2,750 gls, Madras; 2,200 gls, Colombo; 33,525 gls, Rangoon; (Liberty) 13,230 gls, Havre; 13,524 gls, Bordeaux; 1,344 gls, St Nazaire; (Daytonian) 15,120 gls, Manchester; (Black Hawk) 1,375 gls, Antwerp; (Colombia) 1,255 gls, Porto Colombia; (New York) 17,610 gls, Hamburg; 1,200 gls, Timisoara; (Coamo) 1,650 gls, Santo Domingo; (Siboney) 4,125 gls, Vera Cruz; (Varg) 567,126 gls, Manchester; (Tai Yang) 6,600 gls, Manila; 42,290 gls, Shanghai; (Adriatic) 6,120 gls, Liverpool; (Santa Eliza) 385 gls, Pisco; (Collingsworth) 750 gls, Rio Janeiro; 5,970 gls, Santos; 5,500 gls, Montevideo; 7,500 gls, Campana; (City of Evansville) 5,500 gls, Shanghai; (Leviathan) 550 gls, Southampton; (Caledonia) 13,230 gls, Glasgow; (Southern Cross) 19,892 gls, Santos; 11,418 gls, Rio Janeiro; 1,650 gls, Buenos Aires; (Thyra) 1,045 gls, Sanchez; 4,950 gls, San Pedro; (Santa Clara) 3,960 gls, Guayaquil; 1,260 gls, Arica; 1,375 gls, Tocopilla; 2,253 gls, Antofagasta; 4,265 gls, Valparaiso; 1,650 gls, Coquimbo; 6,985 gls, Talcahuano; 3,850 gls, San Antonio; (Santa Paula) 1,250 gls, Cartagena; 3,050 gls, Corinto; 550 gls, Guayaquil; (Musa) 920 gls, Belize; 835 gls, Porto Barrios; 1,100 gls, Porto Cortez; (Western World) 756 gls, Hamilton; 1,008 gls, Rio Janeiro; 3,025 gls, Buenos Aires; (Santa Rosa) 1,040 gls, Amapala
OLEO—(Scanpenn) 9,129 lbs, Trondhjem; (Scanmail) 35,227 lbs, Copenhagen; 67,878 lbs, Copenhagen or Oslo; (Bilderdijk) 72,212 lbs, Rotterdam; (Black Hawk) 24,964 lbs, Antwerp; (Adriatic) 31,619 lbs, Liverpool; (Caledonia) 99,908 lbs, Glasgow
PALE—(Winnebago) 452,214 gls, Manchester; (Varg) 192,864 lbs, Manchester
PEPPERMINT—(Bilderdijk) 1,199 lbs, Rotterdam
PINE—(Atlanta) 12,803 lbs, Trieste
RED—(Black Hawk) 4,522 lbs, Antwerp
TRANSFORMER—(Adriatic) 2,109 gls, Liverpool; (Southern Crose) 1,000 gls, Rio de Janeiro
VALVE—(Winnebago) 120,792 lbs, Manchester; (Varg) 111,468 gls, Manchester
PAINT—(Scanpenn) 8,117 lbs, Copenhagen; (West Kebar) 5,710 lbs, Las Palmas; (Savoia) 4,761 lbs, Genoa; 2,027 lbs, Milan; (Cubano) 8,392 lbs, Buenos Aires; (Silveryew) 2,620 lbs, Cebu; (Bilderdijk) 1,440 lbs, Amsterdam; (Black Hawk) 10,878 lbs, Antwerp; (Collingsworth) 12,136 lbs, Buenos Aires; 19,835 lbs, Rio de Janeiro; (Santa Rosa) 1,240 lbs, Cartagena
ENAMEL—(Excalibur) 1,026 lbs, Cairo; 1,040 lbs, Haifa; 1,026 lbs, Beirut; (Western World) 2,769 lbs, Buenos Aires
PASTE—(Cubano) 2,431 lbs, Santos
THINNER—(Cubano) 15,000 gls, Rio de Janeiro; 8,000 gls, Santos; (Ponce) 250 gls, San Juan; (Western World) 1,100 gls, Buenos Aires
PARAFFIN—(Scanpenn) 55,750 lbs, Copenhagen; 2,231 lbs, Odense; (Exermont) 179,385 lbs, Casablanca; (Atlanta) 119,306 lbs, Bari; 379,093 lbs, Venice; (Vulcania) 307,869 lbs, Naples; (Scanmail) 62,441 lbs, Copenhagen; 55,750 lbs, Helsingfors; (Excalibur) 22,880 lbs, Marseilles; 166,137 lbs, Naples; 22,300 lbs, Marsala; 11,151 lbs, Messina; 44,599 lbs, Palermo; 22,408 lbs, Alexandria; (Metapan) 249,850 lbs, Valparaiso; 27,242 lbs, Puerto Colombia; (Savoia) 5,935 lbs, Genoa; 144,948 lbs, Leghorn; 27,875 lbs, Naples; (Cubano) 15,933 lbs, Santos; (Silveryew) 15,600 lbs, Hongkong; (Black Hawk) 111,498 lbs, Antwerp; (Daytonian) 113,212 lbs, Manchester; (Siboney) 41,045 lbs, Vera Cruz; (Adriatic) 174,111 lbs, Liverpool; (Santa Elisa) 32,320 lbs, Puntarenas; (Collingsworth) 2,231 lbs, Santos; (Haiti) 2,224 lbs, Puerto Colombia; (Santa Clara) 32,840 lbs, Buenaventura; 80,800 lbs, Arica; 44,215 lbs, Talcahuano; (Santa Paula) 6,673 lbs, Cartagena; (Musa) 102,066 lbs, Puerto Barrios; 30,460 lbs, Retalhulen
REFINED—(Black Hawk) 77,855 lbs Antwerp; (Collingsworth) 26,759 lbs, Buenos Aires
SCALE—(Exermont) 62,000 lbs, Casablanca; (Scanmail) 37,544 lbs, Copenhagen; (Bilderdijk) 36,759 lbs, Rotterdam; (Silveryew) 57,788 lbs, Hongkong
PETROLEUM, REFINED—(West Kebar) 3,000 gls, Dakar; 12,000 gls, Monrovia; 6,000 gls, Port Bouet; 5,000 gls, Takoradi; 3,000 gls, Accra; 20,000 gls, Keta; 500 gls, Lome; 10,000 gls, Lagos; 10,000 gls, Port Harcourt; 5,000 gls, Calabar; 2,500 gls, Duala; (Cubano) 60,000 gls, Bahia; 40,000 gls, Rio de Janeiro; 5,000 gls, Santos; (Ponce) 20,000 gls, San Juan; (Thyra) 2,000 gls, Barahona
PHENOL—(Adriatic) 51,929 lbs, Liverpool
POTASH, BICHROMATE — (Excalibur) 8,770 lbs, Alexandria
CHLORATE—(Fairfield) 3,242 lbs, Matanzas
ROSIN—(Black Hawk) 3,924 lbs, Antwerp
SOAP—(Ponce) 3,465 lbs, San Juan; 5,600 lbs, Aguadilla; 5,600 lbs, Arecibo; 11,000 lbs, Arroyo
LAUNDRY—(Ponce) 5,750 lbs, San Juan; 12,000 lbs, Mayaguez; (Majestic) 4,080 lbs, Southampton; (Thyra) 64,856 lbs, San Pedro; (Solhavn) 64,864 lbs, Santo Domingo
SODA ASH—(Quirigua) 42,815 lbs, Guayaquil; (Collingsworth) 9,000 lbs, Rio de Janeiro; 158,992 lbs, Buenos Aires
BICARBONATE—(Morro Castle) 22,675 lbs, Havana; (Collingsworth) 126,540 lbs, Buenos Aires
CAUSTIC—(Morro Castle) 55,074 lbs, Havana; (Quirigua) 36,954 lbs, Guayaquil; (Cubano) 216,450 lbs, Buenos Aires; (Panuco) 16,518 lbs, Progresso; (Fairfield) 84,121 lbs, Havana; 10,793 lbs, Nuevitas; (Colombia) 13,865 lbs, Porto Colombia; 4,720 lbs, Port Prince; (New York) 5,000 lbs, Reykjavik; (Siboney) 330,475 lbs, Vera Cruz; (Tai Yang) 92,415 lbs, Shanghai; (Collingsworth) 216,000 lbs, Rio de Janeiro

SODA, CYANIDE—(Coamo), 2,190 lbs, San Juan
PHOSPHATE, TRIBASIC—(Augustus) 4,900 lbs, Genoa
SILICATE—(Southern Cross) 5,922 lbs, Santos
STARCH, CORN—(Scanpenn) 35,050 lbs, Copenhagen; (City of Oran) 35,250 lbs, Bombay; 186,120 lbs, Calcutta; 11,280 lbs, Rangoon; (Daytonian) 11,280 lbs, Manchester; (Fairfield) 2,283 lbs, Matanzas; (Ponce) 3,465 lbs, Ponce
STEARIN, OLEO—(Excalibur) 13,521 lbs, Marseilles; (Caledonia) 12,252 lbs, Glasgow; (Majestic) 72,258 lbs, Southampton
TALC—(Adriatic) 107,200 lbs, Liverpool; (Caledonia) 44,800 lbs, Glasgow
TALLOW—(Bilderdijk) 46,221 lbs, Rotterdam; (Panuco) 35,246 lbs, Progresso; (Thyra) 11,479 lbs, Porto Plata
TANNING EXTRACT—(Liberty) 10,038 lbs, Bordeaux; (Collingsworth) 2,240 lbs, Santos
TIN OXIDE—(Bilderdijk) 2,802 lbs, Rotterdam
TOLUOL—(Silveryew) 12,936 lbs, Osaka
TURPENTINE — (Cubano) 2,500 gls, Buenos Aires; (Collingsworth) 500 gls, Rio de Janeiro; 1,000 gls, Buenos Aires; (Santa Clara) 550 gls, Talara
VARNISH — (Cubano) 8,276 lbs, Santos; (Adriatic) 2,898 lbs, Liverpool
WITCH HAZEL EXTRACT—(Paris) 2,490 lbs, Havre

Clearance Dates

Adriatic, March 10; Atlanta, March 24; Augustus, March 24; Bilderdijk, March 17; Black Hawk, February 8; Bremen, March 22; Caledonia, March 24; City of Evansville, March 14; Coamo, March 16; Collingsworth, February 10; Colombia, March 8; Cubano, March 6; Cuyamapa, March 22; Daytonian, February 6; Esparta, March 16; Europa, March 22; Excalibur, March 20; Fairfield, February 21; Haiti, March 14; Hoyeisan, March 24; Leviathan, March 8; Liberty, March 8; Majestic, February 25; Metapan, March 4; Morro Castle, February 25; Musa, March 3; New York, March 22; Orizaba, March 6; Panuco, March 1; Paris, March 23; Ponce, March 17; Pulaski, March 30; Rochambeau, March 23; Quirigua, February 21; San Gil, February 15; Santa Clara, March 10; Santa Eliza, March 24; Santa Paula, March 2; Santa Rosa, March 17; Savoia, March 27; Scanmail, March 8; Scanpenn, March 2; Siboney, February 27; Silveryew, March 8; Solhavn, March 24; Southern Cross, February 17; Tai Yang, February 24; Varg, April 5; Vulcania, March 22; West Kebar, March 6; Western World, March 4; Winnebago, March 29

Baltimore Exports

ACID, CHROMIC—6,600 lbs, Wytheville, Antwerp
FUROIC—45 lbs, Wytheville, Rotterdam
ALCOHOL, FURFURYL—45 lbs, Wytheville, Rotterdam
ASPHALT, SOLID—22,594 lbs, City of Newport News, Havre
CHEMICALS—314 lbs, City of Newport News, Prague
COPRA CAKE—102 tons, City of Newport News, Hamburg
CRYOLITE—60,478 lbs, Anna Maersk, Kobe
GLUE, POSTER — 1,000 lbs, Anna Maersk, Dairen
GREASE, LUBRICATING—12 tons, Walter D Munson, Havana; (City of Newport News) 5,125 lbs, Hamburg; 12,225 lbs, Copenhagen
OCHER—2,450 lbs, City of Newport News, Hamburg
OIL, CYLINDER—3,594 gls, Wytheville, Rotterdam; 2,272 gls, City of Newport News, Hamburg
DRYING—24 lbs, City of Newport News, Hamburg
LUBRICATING—3,262 gls, Wytheville, Rotterdam; (City of Newport News) 73 bbls, Hamburg; 8 bbls, Oran
MINERAL—149 bbls, City of Newport News, Havre
PAINT, MIXED—285 gls, City of Newport News, Hamburg
TRAFFIC—100 gls, Wytheville, Antwerp
SAND, PROCESSED—11,900 lbs, City of Newport News, Dresden
SODA, BICHROMATE — 11,200 lbs, Anna Maersk, Osaka

Clearance Dates

Anna Maersk, March 31; City of Newport News, April 4; Walter D Munson, April 1; Wytheville, March 31.

Beaumont Exports

DRUGS—1 cs, Almeria Lykes, San Juan
PETROLEUM, CRUDE — 101,222 bbls, Kaia Knudsen, Havre; 107,210 bbls, Daghild, Port du Bouc

Clearance Dates

Almeria Lykes, March 30; Daghild, April 1; Kaia Knudsen, March 29.

Boston Exports

ALUM, SODA—5 bbls, 1,675 lbs, Evangeline, St John, N B
AMMONIA—10 cs, 390 lbs, Yarmouth, Windsor, N S
BLACK, MINERAL, EARTH—4 ctns, 200 lbs, Evangeline Moncton, N B
CARAWAY SEED—25 bgs, 2,750 lbs, Boschdijk, Rotterdam
CEMENT, CAN—(Maihar) 4 dms, 1,942 lbs, Port Bombay; 20 dms, 1,084 lbs, London
ROOF—1 dm, 550 lbs, Evangeline, St John, N B
WATERPROOF—1 cs, 90 lbs, Maihar, London
COALTAR, CRUDE—10 dms, 4,680 lbs, San Benito, Havana
DISINFECTANT, COALTAR—10 bbls, 300 gls, San Benito, Havana
DRESSING, LEATHER—(Capulin) 1 bx, 35 lbs, Valdemarsvik; 1 bx, 18 lbs, Copenhagen
SHOE—14 cs, 1 bbl, 3 bxs, 15 gls, 1,240 lbs, San Benito, Havana
DRUGGIST'S SUNDRIES—5 cs, 1,212 lbs, San Benito, Havana
EMERY FLOUR—2 bxs, 200 lbs, Capulin, Freiburg
FINISH, LEATHER—1 bbl, 2 kegs, 873 lbs, Maihar, London
GLAUBER'S SALT—25 kegs, 2,500 lbs, San Benito, Havana
GLUE—22 dms, 15 cs, 1,973 lbs, Westerwald, Berlin
FISH—1 bbl, 673 lbs, Capulin, Helsingborg
GREASE, SOAP—(San Benito) 1 dm, 1 bbl, 903 lbs, Cardenas; 1 dm, 12 bbls, 5,685 lbs, Caibarien
GUM, INDIA—1 bx, 57 lbs, Capulin, Helsingborg
PRINTING—1 keg, 100 lbs, Scythia, Accrington
INK, MARKING—1 cs, 42 lbs, Scythia, Leicester
YELLOW—1 bx, 45 lbs, Westerwald, Cologne
LARD—2,825 bxs, 155,375 lbs, Capulin, Hamburg; 1,000 bxs, 56,000 lbs, Maihar, London
LINING COMPOUND—(Capulin) 23 dms, 3,433 lbs, Hamburg; 2 dms, 880 lbs, Goteborg; 90 dms, 40,871 lbs, Maihar, Nantes
MEDICINAL PREPS—2 cs, 136 lbs, Belle Isle, Bell Island, N F; 275 bxs, 1,375 gls, Capulin, London; 3 bxs, 62 lbs, San Benito, Havana; 225 bxs, 1,125 gls, Maihar, London
MICA—2 bgs, 102 lbs, Capulin, Helsingborg
OIL, LUBRICATING—5 bbls, 272 gls, Black Eagle, Antwerp; 10 bbls, 500 gls, Evangeline, St John, N B
PAINT CLEANSER—1 bbl, 300 lbs, Black Eagle, Paris
COPPER—15 cs, 1,825 lbs, San Benito, Havana
PASTE—20 bxs, 2,000 lbs, San Benito, Cristobal
PASTE—1 cs, 6 lbs, Westerwald, Berlin
FLOUR, DRY—10 bbls, 2,850 lbs, Scythia, Leicester
PEANUTS—10 bgs, 939 lbs, Evangeline, St John, N B
PITCH, COALTAR—20 bbls, 1,860 lbs, San Benito, Havana
POLISH, SHOE—28 ctns, 372 lbs, San Benito, Havana
SENNA LEAVES—4 bls, 441 lbs, San Gil, Kingston
SOLDERING FLUX—9 dms, 1,206 lbs, Black Eagle, Antwerp; 3 bbls, 2,100 lbs, Maihar, London
SULPHUR FLOUR, COM'L—2,000 bgs, 300,000 lbs, Irene Myrtle, Kingsport, N S
LIQUID, EMULSION—1 keg, 10 gls, Capulin, Waltham Cross
SUPERFINE—2,000 bgs, 200,000 lbs, Irene Myrtle, Kingsport, N S
TOILET PREPS—5 cs, 1 dm, 1,310 lbs, Maihar, London
TURPENTINE, GUM—10 dms, 520 gls, Belle Isle, Halifax; 15 dms, 3 bbls, 938 gls, Evangeline, St John, N B; (Yarmouth) 1 dm, 57½ gls, Liverpool, N S; 2 dms, 114 gls, Kentville, N S
WAX, SHOE—5 cs, 1 bx, 296 lbs, San Benito, Havana

Clearance Dates

Belle Isle, March 30; Black Eagle, April 1; Boschdijk, March 30; Capulin, March 28; Evangeline, March 30; April 4, 6; Irene Myrtle, April 5; Maihar, April 3; San Benito, March 31; San Gil, April 4; Scythia, April 1; Westerwald, March 30; Yarmouth, April 5

Galveston Exports

ASPHALT—6 tons, Sapinero, Barcelona; (Westmoreland) 75 tons, Havre; 20 tons, Rotterdam; 20 tons, Tripp, Genoa
GILSONITE—340 bgs, Phoenicia, London
BLACK, CARBON—1,500 cs, Hakubasan, Moji; 15 tons, Westmoreland, Havre
COTTONSEED CAKE — 49 tons, Toronto, Esbjerg
MEAL—250 tons, Tortugas, Oslo
MOLYBDENITE—1,200 sx, Toronto, Antwerp
SULPHUR—(Marianne) 500 tons, Tampico; 603 tons, Puerto Mexico; (Wirral) 1,100 tons, Port Chalmers; 880 tons, Wanganui; 1,100 tons, Port Kembla; 1,100 tons, Newcastle; (Effingham) 550 tons, London; 1,250 tons, Hull

Clearance Dates

Effingham, April 6; Hakubasan, March 31; Marianne, March 31; Phoenicia, March 31; Sapinero, March 31; Toronto, April 3; Tripp, April 1; Westmoreland, March 31; Wirral, March 31.

Houston Exports

BLACK, CARBON—15 tons, Kelkheim, Hamburg; 25 tons, Tortugas, Copenhagen; (Westmoreland) 150 tons, Havre; 60 tons, Antwerp; 60 tons, Rotterdam; 500 cs, Monfiore, Genoa; (Toronto) 130 tons, Havre; 65 tons, Antwerp; (Ogontz) 60 cs, Lisbon; 105 cs, Bilbao; 75 cs, Pasages; 303 tons, West Harshaw, Liverpool-Manchester; 200 cs, Karpfanger, Bremen
COTTON LINTERS—500 bls, Kelkheim, Hamburg
COTTONSEED CAKE — 1,000 tons, Toronto, Esbjerg
MEAL—50 tons, Toronto, Antwerp; 100 tons, West Harshaw, Liverpool
GASOLINE—7,500 tons, Achatina, Montreal
GREASE, LUBRICATING—30 bbls, Westmoreland, Antwerp
LARD—(West Harshaw) 280 tons, Liverpool; 210 tons, Manchester
OIL, BONE—5 tons, Kelkheim, Hamburg
LUBRICATING—56 dms, Genevieve Lykes, Santo Domingo City
SALAD—50 tons, Tillie Lykes, Cristobal
POTASH—50 tons, Genevieve Lykes, San Juan
ROSIN—160 bbls, Cingalese Prince, Shanghai

Clearance Dates

Achatina, March 31; Cingalese Prince, April 1; Karpfanger, April 6; Kelkheim, March 31; Genevieve Lykes, April 6; Monfiore, April 1; Ogontz, April 4; Tillie Lykes, March 31; Toronto, March 31; West Harshaw, April 5; Westmoreland, April 3.

Lake Charles Exports

ROSIN, WOOD—35 bbls, Westmoreland, Antwerp

Clearance Date

Westmoreland, March 31.

Los Angeles Exports

ACID, BORIC—800 bgs, 90,400 lbs, Counsellor, Liverpool; 200 bgs, 22,600 lbs, Fresno City, London
ASPHALT—17 dms, 8,130 lbs, Malolo, Honolulu; 350 bbls, 176,620 lbs, La Purisima, Balboa
BENZIN—10 cs, La Purisima, Balboa
BLACK, CARBON—3 cs, 230 lbs, Golden Eagle, Melbourne
BLACKING, SHOE—56 ctns, 2,120 lbs, Malolo, Honolulu
BLUING, LIQUID—10 ctns, 160 lbs, Diamond Head, Honolulu; 25 ctns, 390 lbs, Malolo, Honolulu
BORATE ORE—3,160 bgs, 556,840 lbs, Counsellor, London; 5,243 sx, 809,050 lbs, Portland, Hamburg
BORAX—100 bgs, 11,200 lbs, Golden Sun, Tientsin; 2 sx, 230 lbs, Diamond Head, Honolulu; 20 pkgs, 2,240 lbs, Golden Eagle, Wellington
GRANULAR—(Counsellor) 600 bgs, 67,800 lbs, London; 2,800 bgs, 315,400 lbs, Liverpool; 1,200 bgs, 135,600 lbs, Fresno City, London
CANARY SEED—10 sx, 1,000 lbs, Diamond Head, Honolulu
CARBON DIOXIDE, SOL—1 bx, 2,580 lbs, Diamond Head, Honolulu; 2 bxs, 4,940 lbs, Malolo, Honolulu
CEMENT—4 dms, 2,000 lbs, Diamond Head, Papaikou; 10 dms, 5,000 lbs, Malolo, Honolulu
RUBBER—2 ctns, 30 lbs, Diamond Head, Honolulu; (Malolo) 4 ctns, 50 lbs, Nawiliwili; 1 cs, 60 lbs, Honolulu
CHEMICAL COMPOUND—8 pkgs, 190 lbs, Diamond Head, Honolulu; 1 cs, 140 lbs, Admiral Senn, Vancouver
CITROUS JUICE—1 bbl, 500 lbs, Malolo, Honolulu; 400 pkgs, 29,450 lbs, Pacific Enterprise, London
CLEANING COMPOUND—1 bbl, 330 lbs, Diamond Head, Honolulu
COTTON LINTERS—4 bls, 2,820 lbs, Malolo, Honolulu
DENTIFRICE—1 ctn, 30 lbs, Diamond Head, Honolulu
DRESSING, SHOE—6 cs, 180 lbs, Admiral Laws, Vancouver
DRUGS, VEGETABLE, CRUDE—200 lbs, Diamond Head, Honolulu
ENAMEL REMOVER—1 cs, 60 lbs, Diamond Head, Honolulu
FIRECLAY—16 pkgs, 10,780 lbs, Golden Eagle, Wellington; 20 sx, 2,000 lbs, Diamond Head, Honolulu; 20 sx, 2,200 lbs, Malolo, Honolulu
GAS, COMPRESSED—50 cyls, Santa Cecilia, Panama City; 1 cyl, Malolo, Honolulu
GASOLINE—1,000 cs, Taybank, Manila; 3,952 bbls, Brazos, Coco Solo; 15,477 bbls, San Luis, Tsurumi; (Filefjell) 47,391 bbls, Curacao; 47,993 bbls, London; 10 cs, 19,238 bbls, La Purisima, Balboa; 6 dms, Rosina, Ensenada
GLASS, PLATE—1 bx, 1,230 lbs, Diamond Head, Honolulu
GREASE, LUBRICATING—23 pkgs, 3,700 lbs, Taybank, Manila; 21 pkgs, 2,900 lbs, La Purisima, Balboa; 3 pkgs, 180 lbs, Diamond Head, Honolulu; 3 bbls, 580 lbs, Malolo, Honolulu
GUM, DAMMAR—10 cs, 1,360 lbs, Dorothy Alexander, Victoria
INFUSORIAL EARTH—580 bgs, 56,000 lbs, Portland, Hamburg; 2,130 bgs, 201,600 lbs, President Wilson, Central Hershey; (Pacific Enterprise) 500 bgs, 56,000 lbs, Witton; 1,170 bgs, 112,000 lbs, Glasgow; 475 bgs, 44,800 lbs, Manchester; 85 bgs, 6,720 lbs, Fresno City, London
INK, PRINTING—8 kits, 660 lbs, Diamond Head, Honolulu
WRITING—15 bxs, 2,600 lbs, Taybank, Manila
KEROSENE—(Taybank) 1,000 cs, Manila; 50 cs, 10 dms, Hongkong; 150 cs, Golden Eagle, Auckland; 4,500 cs, La Purisima, Balboa
LACQUER—5 cs, 230 lbs, Diamond Head, Honolulu
PIGMENTED—9 cs, 370 lbs, Diamond Head, Honolulu; 7 ctns, 250 lbs, Malolo, Honolulu
THINNER—1 dm, 440 lbs, Diamond Head, Honolulu
LARD—1 trc, 370 lbs, Diamond Head, Honolulu
SUBSTITUTE—(Diamond Head) 196 crts, 192 cans, 130 cs, 622 pkgs, 45,820 lbs, Honolulu; 10 cans, 95 crts, 185 cs, 5 tins, 12,070 lbs, Hilo; 25 cans, 206 pkgs, 12,530 lbs, Kahului; 276 crts, 10,080 lbs, Pt Allen; 130 cs, 4,680 lbs, Paia; 15 cans, 680 lbs, Kolo; 115 cs, 96 cans, 50 crts, 48 pkgs, 13,320 lbs, Malolo, Honolulu
MEDICINAL PREPS—2 bxs, 30 lbs, Golden Eagle, Wellington; 46 ctns, 530 lbs, Diamond Head, Honolulu; 1 bx, 260 lbs, Malolo, Honolulu
MINERAL SPIRIT—12 cs, Santa Cecilia, San Jose; 115 cs, 40 bbls, La Purisima, Balboa
OIL, DIESEL—49,199 bbls, Fujisan, Tsurumi-Osaka; 3,626 bbls, Falstria, Hongkong; 3,200 bbls, La Purisima, Puerto Armuelles
FLOOR—1 cs, Malolo, Hilo
FUEL—23,800 bbls, Argyll, Santa Rosalia; 48,199 bbls, Brazos, Coco Solo; 27,283 bbls, Fujisan, Tsurumi-Osaka; 28,255 bbls, Athelknight, Yokohama; 30,200 bbls, La Purisima, Corinto
GAS—6,323 bbls, Taybank, Hongkong
LUBRICATING—(Santa Cecilia) 50 dms, Puntarenas; 6 dms, San Jose; 15 dms, Balboa; 40 dms, Golden Eagle, Melbourne; 423 bbls, 103 cs, La Purisima, Balboa; 3 pkgs, Diamond Head, Honolulu; 88 dms, Malolo, Honolulu
OLEO—4 dms, Diamond Head, Honolulu; 4 dms, Malolo, Honolulu
ORANGE JUICE—2 pkgs, 160 lbs, Diamond Head, Kahului; 5 kegs, 500 lbs, Malolo, Honolulu
PAINT—(Diamond Head) 9 bxs, 270 lbs, Honolulu; 11 pkgs, 70 lbs, Kailua
MIXED—3 ctns, 90 lbs, Malolo, Honolulu
PETROLEUM, CRUDE—83,226 bbls, Ontariolite, Ioco; 7,625 bbls, Texada, Vancouver
GAS, LIQ—9 cyls, Texada, Shellburn; 35 cyls, Diamond Head, Kahului
POLISH—14 ctns, 300 lbs, Diamond Head, Honolulu
SHOE—2 ctns, 160 lbs, Diamond Head, Honolulu; 8 ctns, 330 lbs, Malolo, Honolulu
ROSIN, GUM — 50 bbls, 25,000 lbs, Golden Eagle, Wellington
SOAP—4 pkgs, 200 lbs, Diamond Head, Honolulu
FLAKES—(Diamond Head) 91 cs, 3,450 lbs, Honolulu; 65 cs, 6,300 lbs, Kahului; 8 cs, 260 lbs, Pt Allen; 48 cs, 1,700 lbs, Malolo, Honolulu
GRANULATED—(Diamond Head) 245 pkgs, 9,840 lbs, Honolulu; 2,750 lbs, Hilo
LAUNDRY—(Diamond Head) 250 cs, 14,100 lbs, Honolulu; 450 cs, 22,800 lbs, Hilo; 33 cs, 1,980 lbs, Kahului; 20 cs, 1,200 lbs, Pt Allen; 35 cs, 1,960 lbs, Paia; (Malolo) 505 cs, 33,800 lbs, Honolulu; 57 cs, 2,790 lbs, Ahukini; 13 cs, 940 lbs, Pt Allen
POWDER—(Diamond Head) 163 pkgs, 9,790 lbs, Honolulu; 100 cs, 6,000 lbs, Hilo; 20 cs, 780 lbs, Kahului; 20 cs, 970 lbs, Paia; 13 pkgs, 500 lbs, Malolo, Honolulu
SHAVING—12 cs, 280 lbs, Malolo, Honolulu
TOILET—(Diamond Head) 40 pkgs, 720 lbs, Hawaiian Islands; 310 cs, 12,400 lbs, and 3,240 lbs, Honolulu; 20 cs, 1,320 lbs, Hilo; 30 pkgs, 1,470 lbs, Kahului; 30 cs, 1,380 lbs, Pt Allen; 15 cs, 840 lbs, Paia; (Malolo) 14 pkgs, 410 lbs, Hawaii; 67 cs, 2,120 lbs, Honolulu; 320 lbs, Ahukini
SOLVENT—5 cs, 280 lbs, La Purisima, Balboa
PIPE—50 cs, 1,400 lbs, Diamond Head, Honolulu
SOYBEANS—175 bgs, 17,500 lbs, Malolo, Honolulu
SPONGES—2 ctns, 10 lbs, Diamond Head, Honolulu
SULPHUR DIOXIDE—1 dm, 150 lbs, Malolo, Honolulu
TOILET PREPS — (Diamond Head) 940 lbs, Hawaiian Islands; 20 pkgs, 1 cs, 480 lbs, Honolulu; 90 lbs, Malolo, Hawaii
TURPENTINE, GUM—50 cs, Golden Eagle, Melbourne
WOOD—2 dms, Golden Eagle, Auckland
VARNISH—1 ctn, 60 lbs, Malolo, Honolulu
WASHING POWDER—7 pkgs, 1,420 lbs, Malolo, Honolulu
WAX, REF'D—4 cs, 130 lbs, La Purisima, Balboa

Clearance Dates

Admiral Laws, March 28; Admiral Senn, April 4; Argyll, March 20; Athelknight, April 3; Brazos, March 30; Counsellor, March 29; Diamond Head, March 22; Dorothy Alexander, April 3; Falstria, March 23; Filefjell, April 1; Fresno City, March 31; Fujisan, March 29; Golden Eagle, April 1; Golden Sun, March 18; La Purisima, March 30; Malolo, March 16; Ontariolite, March 29; Pacific Enterprise, March 25; Portland, March 23; President Wilson, March 24; Rosina, April 4; San Luis, March 30; Santa Cecilia, March 25; Taybank, March 25; Texada, March 31.

Mobile Exports

CORNFLOUR—432 bgs, Nubian, Manchester; 750 bbls, Cingalese Prince, Shanghai
COTTON LINTERS—(Nubian), 152 bls, Liverpool; 80 bls, Manchester
LARD—6,100 bxs, Nubian, Manchester; (Wacosta), 5,700 bxs, 250 trcs, Liverpool; 2,500 bxs, 1,700 trcs, Manchester; 129 trcs, Glasgow; (Gateway City), 2,000 bxs, London; 600 trcs, 900 bxs, Hamburg
LIME—1,320 sxs, Fairisle, Puerto Rico
PITCH—80 dms, Marianne, Puerto Mexico
ROOTS, MEDICINAL—2 bls, Gateway City, London
ROSIN—4 bbls, Marianne, Puerto Mexico; (Wacosta), 600 bbls, Glasgow; 200 bbls, Liverpool; 400 bbls, Veerhaven, Hamburg; (Gateway City), 680 bbls, Hamburg; 300 bbls, Rotterdam; 210 bbls, Wiegand, Hamburg; (Cingalese Prince), 25 bbls, Sourabaya; 25 bbls, Semarang; 102 bbls, Batavia; 200 bbls, Shanghai
STARCH—(Wacosta), 1,264 bgs, Liverpool; 1,040 bgs, Manchester; (Gateway City), 432 bgs, London; 432 bgs, Rotterdam
CORN—432 bgs, Nubian, Manchester
TOILET PREPS—5 bxs, Fairisle, Puerto Rican Ports
TURPENTINE—50 bbls, Wacosta, Glasgow

Clearance Dates

Cingalese Prince, March 20; Fairisle, April 1; Marianne, April 3; Nubian, March 31; Veerhaven, March 29; Wacosta, March 29; Wiegand, March 29

New Orleans Exports

ALUMINA SULPHATE—60 sx, Tegucigalpa, Tampico
ASPHALT—80 dms, Nubian, Liverpool; 1,128 sx, San Pedro, Havre; 257 sx, City of Lincoln, Calcutta; 32 tons, Waban, Hamburg; 230 sx, 20 tons, City of Joliet, Havre
GILSONITE—210 sx, Frankfurt, Hamburg
PETROLEUM—3 tons, City of Joliet, Rotterdam
BLACK, CARBON—36 cs, Silverwillow, Calcutta; 500 cs, Nubian, Manchester; (Buenos Aires) 225 cs, Yokohama; 92 cs, Kobe; (West Hobomac) 100 cs, 124 tons, London; 78 tons, Hull; 1,052 cs, San Pedro, Havre; 6 pkgs, Monfiore, Genoa; 125 cs, Tortugas, Gothenburg; 1,730 cs, Frankfurt, Hamburg; (Waban) 8 tons, Hamburg; 3 tons, Rotterdam; 36 cs, Silverwillow, Calcutta; 8 cs, Tegucigalpa, Vera Cruz; 6,200 sx, Morazan, Vera Cruz
CORN OILMEAL—1,120 sx, Frankfurt, Hamburg; 201 tons, Waban, Hamburg
COTTON LINTERS—100 bls, Silverwillow, Capetown; 260 bls, Nubian, Liverpool; 50 bls, San Pedro, Havre; (Frankfurt) 500 bls, Bremen; 436 bls, Hamburg; 450 bls, Hamburg for transshipment; 500 bls, Waban, Hamburg
COTTONSEED MEAL—3,360 sx, Frankfurt, Hamburg
GASOLINE—5,545 dms, City of Lincoln, Bedl Bunder
GLUCOSE—(Nubian) 120 bbls, Liverpool; 120 bbls, Manchester; (West Hobomac) 123 tons, London; 23 tons, Newcastle; 67 tons, Hull
GREASE, LUBRICATING—160 bbls, Silverwillow, Lourenco Marques; 10 dms, 21 cs, City of Lincoln, Calcutta
INK, PRINTING—88 dms, 2 kits, Morazan, Vera Cruz
KEROSENE—325 cs, Isabela, San Juan
LARD—(Isabela) 115 tubs, 20 crts, 825 tins, 1,879 pkgs, San Juan; 1,900 tins, 620 pkgs, Santo Domingo City; 35 pkgs, Fajardo; 720 tins, 25 tubs, 1,126 pkgs, Ponce; 2,876 pkgs, 50 tins, Mayaguez; 50 tubs, 40 tins, 260 pkgs, Aguadilla; 165 tins, 15 tubs, Arecibo; 5,000 cs, Nubian, Liverpool; 600 cs, Manchester; (West Hobomac) 281 tons, London; 157 tons, Hull; 6,000 cs, Frankfurt, Hamburg; 129 tons, Waban, Hamburg
SUBSTITUTE—(Isabela) 50 tubs, San Juan; 75 tubs, Ponce; (Buenos Aires) 75 ctns, Yokohama; 50 cs, Kobe
METHYLENE—75 dms, San Pedro, Havre
OIL, COTTONSEED—60 bbls, San Pedro, Antwerp
COTTONSEED, REFD—(Buenos Aires) 110 dms, Yokohama; 10 dms, Kobe
LUBRICATING—46 tons, City of Joliet, Havre; 13 tons, Aldecoa, Valencia; 102 bbls, Silverwillow, Karachi; (Buenos Aires) 206 dms, Yokohama; 65 dms, Kobe; 75 dms, Osaka; (Nubian) 20 bbls, Liverpool; 20 bbls, Manchester; 21 tons, West Hobomac, London; 150 bbls, Monfiore, Genoa; (City of Lincoln) 155 dms, Alexandria; 10 dms, 21 cs, Calcutta; 14 bbls, Frankfurt, Hamburg
MINERAL—70 bbls, San Pedro, Dunkirk
OLEO—25 trcs, Nubian, Liverpool; 3 tons, West Hobomac, London; 68 tons, Waban, Hamburg
REFINED—50 dms, Isabela, Ponce
PAINT—89 pkgs, Isabela, San Juan; 20 dms, Tegucigalpa, Vera Cruz
PETROLATUM—26 tons, Aldecoa, Barcelona
ROSIN—50 bbls, Nubian, Liverpol; 450 bbls, Tortugas, Mantyluoto; (Frankfurt) 50 bbls, Bremen; 250 bbls, Hamburg; 11 tons, Waban, Hamburg; (City of Joliet) 6 tons, Antwerp; 2 tons, Rotterdam/Hamburg/London
SOAP—(Isabela) 90 cs, San Juan; 25 cs, Mayaguez; 25 cs, Aguadilla
SODA NITRATE—5 bbls, Morazan, Vera Cruz
STARCH—5 tons, West Hobomac, London
CORN—1,532 sx, Nubian, Manchester; 28 tons, West Hobomac, London
TANNING EXTRACT—6 bbls, Morazan, Vera Cruz
TAR, PINE—20 dms, Tegucigalpa, Vera Cruz
TOBACCO EXTRACT—100 bbls, Frankfurt, Bremen
TRIPOLI—(Frankfurt) 110 sx, Bremen; 110 sx, Hamburg; 5 tons, City of Joliet, Rotterdam
PULVERIZED—300 sx, San Pedro, Havre
TURPENTINE—22 dms, City of Lincoln, Alexandria
AND LACQUER—(Silverwillow) 174 cs, Capetown; 50 cs, Lourenco Marques; 22 dms, City of Lincoln, Alexandria
VARNISH—20 dms, Tegucigalpa, Vera Cruz
WAX—(Nubian) 126 bbls, Liverpool; 536 bbls, Manchester; 322 sx, Buenos Aires, Kobe; 54 tons, West Hobomac, London; 11 tons, Waban, Rotterdam
FLOOR—18 cs, Morazan, Vera Cruz
WHITING—5 bbls, Isabela, San Juan

Clearance Dates

Aldecoa, April 6; Buenos Aires, March 23; City of Joliet, March 31; City of Lincoln, March 24; Frankfurt, March 31; Isabela, March 29; Monfiore, March 28; Morazan, March 1, 15; Nubian, March 29; San Pedro, April 1; Silverwillow, April 1; Tegucigalpa, March 25; Tortugas, March 28; Waban, March 31; West Hobomac, March 30

Norfolk Exports

ALCOHOL—10 bxs, Martinique, Port au Prince
BARK, MEDICINAL—1 bl, 498 lbs, City of Baltimore, Hamburg
COPRA CAKE—937 bgs, 228,551 lbs, City of Baltimore, Hamburg
CORN OILMEAL—2,840 bgs, 286,655 lbs, City of Baltimore, Hamburg
PETROLEUM PRODUCTS—10 cs, 3,055 lbs, City of Baltimore, Havre
ROOTS, MEDICINAL—8 bgs, 684 lbs, City of Baltimore, Hamburg
SASSAFRAS BARK—1 bl, City of Baltimore, Havre
LEAVES—2 bls, City of Baltimore, Havre
ROOT—7 bgs, 1,114 lbs, Ingram, Hamburg
SOAP, LAUNDRY—150 bxs, Martinique, Port au Prince
SULPHUR DIOXIDE, LIQ—20 cyls, Topeka, Copenhagen
TANNING EXTRACT—225 bgs, 33,750 lbs, Wytheville, Rotterdam

Pensacola Exports

ROSIN, GUM—(Meanticut), 1,775 bbls, Genoa; 200 bbls, Naples; 800 bbls, Venice; 200 bbls, Trieste; 310 bbls, Veerhaven, Glasgow

Clearance Date

Meanticut, April 1

Philadelphia Exports

BRISTLES—12 bls, Capulin, London
CHEMICALS—4 cs, Hokuroku, Yokohama
COLORS, COALTAR—13 dms, 2 bbls, Cypria, Barcelona
DYEWOOD EXTRACT — 32 bbls, Savoia, Genoa
GASOLINE—(Caxambu) 1,000 cs, Rio de Janeiro; 6,700 cs, Santos; 9,000 cs, Rio Grande do Sul; (Svolder) 13,091 bbls, Cape Town; 31,005 bbls, East London; 21,622 bbls, Durban; (New Brunswick) 3,500 cs, Dakar; 400 cs, Bathurst; 1,000 cs, Freetown; 1,000 cs, Takoradi; 250 cs, Salt Pond; 2,000 cs, Accra; 9,600 cs, Lagos; 1,500 cs, Duala; 1,000 cs, Kribi; 1,320 cs, Bissau
GREASE—10 bbls, Cypria, Spain
ANIMAL, INED—110 dms, Cypria, Spain
LUBRICATING—1 bx, San Vincente, Cristobal; (Winton) 20 cs, 11 dms, Brisbane; 20 cs, 1 dm, Adelaide; (Svolder) 5 cs, Cape Town; 50 cs, Durban; 38 bbls, Capulin, London
PETROLEUM—(New Brunswick) 15 cs, Bissau; 20 cs, Port Bouet; 5 cs, Takoradi; 10 cs, 5 dms, Accra; 15 cs, Duala; (Cypria) 10 bbls, Portugal; 1 bbl, Spain
INK, WRITING—3 bbls, Santa Elena, Barranquilla; 1 cs, 3 straps, San Vincente, Colon
KEROSENE—5,000 cs, Caxambu, Rio de Janeiro; 1 pkg, Savoia, Genoa
MEDICINAL PREPS—4 ctns, San Vincente, Corinto
MINERAL SPIRIT—(Svolder) 25 cs, Cape Town; 10 cs, East London; 150 cs, 100 bbls, Durban; (Caxambu) 500 cs, Rio de Janeiro; 115 dms, Rio Grande do Sul
OIL, COMPOUND (Waukegan) 11 bbls, Havre; 50 bbls, Bordeaux; 22 bbls, St Nazaire
FUEL—2,500 cs, Caxambu, Rio Grande do Sul
ILLUMINATING—(Caxambu) 5,000 cs, Rio Grande do Sul; 8,000 cs, Rio de Janeiro; 6,300 cs, Santos; (Svolder) 3,300 cs, 3,081 bbls, Cape Town; 3,800 cs, East London; 3,081 bbls, 2,200 cs, Durban; 100 bbls, Waukegan, Havre
LUBRICATING — (Waukegan) 90 bbls, St Nazaire; 210 bbls, Bordeaux; 200 bbls, Caxambu, Rio de Janeiro; 115 dms, Hokuroku, Osaka; (Cypria) 100 bbls, Marseilles; 15 dms, Barcelona; 953 bbls, Spain; 507 bbls, 110 dms, 442 cs, Portugal; 30 dms, France; (Capulin) 101 dms, London; 225 bbls, Hamburg; (Troubadour) 100 dms, Bahia Blanca; 173 pkgs, Puerto Alegre; (Winton) 864 pkgs, 325 pls, 5 dms, Brisbane; 80 pkgs, 85 dms, Sydney; 776 pkgs, 150 pails, 141 dms, 20 cs, Adelaide; 35 pkgs, Geelong; 1,670 pkgs, Melbourne; 38 pkgs, Fremantle; (Svolder) 250 dms, 50 cs, Cape Town; 50 dms, 135 cs, East London; 165 dms, 140 cs, Durban; (New Brunswick) 28 cs, 2 bbls, 8 dms, Teneriffe; 75 cs, Dakar; 130 cs, 18 dms, Bissau; 5 dms, Freetown; 70 dms, Port Bouet; 13 dms, Takoradi; 5 cs, Accra; 20 cs, Lome; 210 cs, Lagos; 50 cs, Port Harcourt; 50 cs, Duala; (Savoia) 1,014 pkgs, 87 bbls, 1 can, Genoa; 5 pkgs, 5 bbls, Naples
MINERAL—(Waukegan) 61 bbls, Havre; 104 bbls, 7 dms, Bordeaux; 55 bbls, 10 cs, St Nazaire
PETROLEUM—300 cs, San Vincente, Cristobal
PAINT, ASPHALT—3 dms, 1 crt, Savoia, Genoa
RED ELASTIC—2 pails, Capulin, Oslo
PARAFFIN—800 bgs, Cypria, Spain; 122 bgs, Santa Elena, Valparaiso
REFINED—2,000 bgs, Cypria, Spain; 3,300 bgs, Navemar, Spain; 102 bgs, Capulin, Dundee; 162 bgs, Sea Victory, Bristol
UNREFINED—360 bbls, Sea Victory, Bristol
WHITE SCALE—451 bbls, Sea Victory, Bristol
PETROLEUM, REFD—(New Brunswick) 250 cs, 10 dms, Bissau; 1,700 cs, Freetown; 500 cs, Port Bouet; 3,000 cs, Lagos; 500 cs, Calabar; 50 cs, Duala; 50 cs, Kribi
PLASTER PARIS—3 cs, Savoia, Genoa
POLISH, SHOE—10 cs, Santa Elena, Panama
SOAP, LAUNDRY — 600 bxs, Sea Victory, Bristol
TANNING EXTRACT—12 bbls, Caxambu, Rio de Janeiro
TURPENTINE SUBSTITUTE—100 cs, Caxambu, Santos
VARNISH, TRANSPARENT—1 can, Savoia, Genoa

Clearance Dates

Capulin, March 24; Caxambu, March 28; Cypria, March 30; Hokuroku, March 25; Navemar, March 30; New Brunswick, April 4; Santa Elena, March 27; San Vincente, March 25; Savoia, March 24; Sea Victory, April 5; Svolder, April 1; Troubadour, March 28; Waukegan, April 1; Winton, March 29

Port Arthur Exports

ASPHALT—3 cs, 400 dms, 200 bbls, Beaumont, Antwerp; 25 dms, Beth, Stockholm; 4 bxs, Saugerties, Santos; (Tillie Lykes), 10 dms, La Romana; 2 dms, 1 bbl, Cristobal
LIQUID—(Beth), 5 cs, Malmo; 40 dms, Gothenburg
GASOLINE—(Beaumont), 26,302 bbls, Amsterdam; 24,139 bbls, Antwerp; 71,413 bbls, Beth, Stockholm; 22,013 bbls, Reaper, Preston; (Tillie Lykes), 100 bbls, Cristobal; 50 bbls, San Pedro de Macoris
GREASE—4 dms, Tillie Lykes, San Pedro de Macoris
LUBRICATING—36 bbls, 77 cs, Beaumont, Antwerp; 10 bbls, 10 dms, Malmanger, Bordeaux; 128 dms, 21 cs, Stockholm; 78 dms, 10 cs, Malmo; 2 dms, 10 cs, Gothenburg; 28 dms, Almeria Lykes, Humacao
KEROSENE—16,618 bbls, Beaumont, Amsterdam; 4,052 bbls, Beth, Stockholm; 1,000 cs, Tillie Lykes, Panama City; 31,260 bbls, Dirigo, Shanghai
OIL—(Tillie Lykes), 17 dms, 2 cs, Cristobal; 44 dms, San Pedro de Macoris; 5 dms, La Romana
BLACK—2,882 bbls, Dirigo, Shanghai
CYLINDER—4,288 bbls, Dirigo, Shanghai
LUBRICATING—(Beth), 25 bbls, 717 dms, 82 cs, Stockholm; 237 dms, 27 cs, Malmo; 35 dms, 30 cs, Gothenburg; 10 dms, Almeria Lykes, Humacao; 220 bbls, 180 dms, 30 cs, Beaumont, Antwerp; 21,778 bbls, Dirigo, Shanghai
PARAFFIN—(Beaumont), 40 cs, Amsterdam; 2 cs, Antwerp
PETROLEUM, CRUDE—70,896 bbls, Malmanger, Bordeaux
PRODUCTS—(Saugerties), 12,055 cs, 13 bbls, Pernambuco; 8,500 cs, Para; 13,375 cs, 317 bbls, Bahia; 1,164 cs, Rio de Janeiro; 1 lot, Santos; 10,135 cs, 75 bbls, 505 dms, Montevideo; 1,052 cs, 25 dms, La Plata; 6,200 cs, Rosario; 314 containers, 220 cs, 884 bbls, 750 dms, Buenos Aires
SULPHUR—1,160 bgs, Saugerties, Rio de Janeiro
TURPENTINE, GUM—30 dms, Saugerties, La Plata

Clearance Dates

Beaumont, March 15; Beth, March 21; Dirigo, March 18; Almeria Lykes, March 30; Malmanger, March 20; Reaper, March 27; Saugerties, April 3; Tillie Lykes, March 30

San Francisco Exports

ACID, ACETYLSALICYLIC—1 cs, Maui, Honolulu
OXALIC—5 bbls, Maui, Hawaiian Islands
ALCOHOL—1 cs, Maui, Paahau
MEDICINAL—92 cs, Malolo, Hawaiian Islands
AMMONIA—25 cs, Maui, Hawaiian Islands
ANTISEPTIC—10 cs, Malolo, Hawaiian Islands
ASPHALT—(Lubrico), 200 bbls, Hilo; 75 bbls, Honolulu
BAKING POWDER—(Maui), 12 cs, Hawaiian Islands; 5 cs, Paia; 4 cs, Kaanapali
BLACK, LAMP—10 cs, Maui, Honolulu
BLEACHING POWDER—6 cs, Maui, Hawaiian Islands
BRUSHES—10 cs, Malolo, Honolulu; (Maui), 4 cs, Hawaiian Islands; 1 cs, Honolulu; 1 cs, Paia
BUTTERMILK, DRIED—5 bbls, 10 kegs, President Hayes, Honolulu
CALCIMINE—12 cs, Maui, Hawaiian Islands
CALCIUM CARBIDE—6 dms, Stanley Dollar, Guam
CANDLES—(Lubrico), 10 bxs, Kahului; 20 bxs, Hilo
CARAWAY SEED—1 cs, Maui, Hawaiian Islands
CARBON DIOXIDE—54 cyls, Malolo, Hawaiian Islands
CHARCOAL—1 lot, Maui, Hawaiian Islands
CHEMICAL GLASSWARE—(Maui), 1 cs, Paahau; 1 cs, Paia
CHEMICALS—(Stanley Dollar), 1 cs, Guam; 1 cs, Agana; 1 cs, 6 dms, Maui, Hawaiian Islands
CEMENT, LINOLEUM—11 pkgs, Maui, Honolulu
PIPE FITTING—2 cs, Maui, Honolulu
CHINA CLAY—80 sks, Maui, Kahului
CHLORINE BLEACH, LIQ—256 cs, Maui, Hawaiian Islands
CLEANING FLUID—3 bxs, Lubrico, Kahului
CLEANSER—(Maui), 29 cs, Hawaiian Islands; 1 cs, Paia
COALTAR—5 dms, Malolo, Hawaiian Islands; (Maui), 10 dms, Hawaiian Islands; 10 dms, Kahului
COCONUT, DESIC—2 cs, Malolo, Hawaiian Islands; 1 cs, Maui, Hawaiian Islands
COLORS, DRY—2 kegs, Maui, Hawaiian Islands
DRY EARTH—1 cs, 14 ctns, 1 keg, Maui, Hawaiian Islands
DENTIFRICE—24 ctns, Malolo, Hawaiian Islands; 20 cs, Maui, Honolulu
DEODORANT—1 cs, Malolo, Hawaiian Islands
DISINFECTANT—1 cs, 6 dms, Maui, Hawaiian Islands
DRESSING, BELT—5 cs, Lubrico, Kahului
DRUG EXTRACT—9 cs, Malolo, Hawaiian Islands; 1 ctn, Maui, Honolulu
DRUGGIST'S SUNDRIES—54 ctns, Malolo, Hawaiian Islands; (Maui), 6 cs, Hawaiian Islands; 118 cs Honolulu
DYES—3 ctns, President Hayes, Honolulu
EARTH, MINERAL—20 cs, Maui, Hawaiian Islands
ENAMEL—2 cs, President Hayes, Honolulu
ETHER—4 ctns, Maui, Honolulu
FILTER PAPER—4 cs, Maui, Aiea
FIRE EXTINGUISHER LIQUID—3 pkgs, Malolo, Hawaiian Islands
FISH MEAL—32 sks, Maui, Hawaiian Islands
FLAVORING EXTRACT—(Maui), 2 pkgs, Hawaiian Islands; 4 cs, Kaanapali
GASOLINE—69,060 bbls, Lubrico, Hilo/Honolulu/Kahului
GLANDULAR PRODUCTS—29 cs, Maui, Hawaiian Islands
GLASS, WINDOW—17 bxs, Maui, Hawaiian Islands
GLUE—1 bbl, Malolo, Hawaiian Islands; 1 pkg, Maui, Paia
GLYCERIN—2 cs, Maui, Hawaiian Islands
GRAPHITE—1 dm, Maui, Honolulu
PASTE—2 cs, Maui, Hawaiian Islands
GREASE, LUBRICATING—(Lubrico), 68 bbls, 65 cs, Kahului; 24 bxs, Hilo; 11 dms, 64 bxs, Honolulu; 9 bbls, Maui, Hawaiian Islands
INSECTICIDE—(Lubrico), 39 bxs, Hilo; 9 dms, 7 bbls, 25 cs, Honolulu
LIQUID—1 dm, Malolo, Hawaiian Islands; (Maui), 5 cs, Hawaiian Islands; 25 dms, Kahului
POWDER—2 ctns, Maui, Hawaiian Islands
KEROSENE—10,075 bbls, Lubrico, Hilo/Honolulu/Kahului
LACQUER—(Maui), 49 cs, 36 dms, Hawaiian Islands; 2 cs, Honolulu
THINNER—(Maui), 1 cs, Hawaiian Islands; 2 cs, Honolulu
LARD—(Maui), 14 cs, Hawaiian Islands; 1 cs, Kahului
COMPOUND—1 bbl, 1 trc, 46 cs, Maui, Hawaiian Islands
SUBSTITUTE — (Maui), 52 cs, Hawaiian Islands; 2 cs, Naalehu; 10 cs, Honolulu; 6 cs, Paia; 9 cs, Haiku
LEAD ARSENATE—1 cs, Stanley Dollar, Agana
WHITE IN OIL—1 keg, Malolo, Hawaiian Islands; 16 kegs, Maui, Hawaiian Islands
LINSEED MEAL—(Maui), 28 sks, Hawaiian Islands; 20 sks, Kahului
MAGNESIA—15 bbls, Maui, Honolulu
MALTED MILK—12 crts, ½ bbl, Maui, Hawaiian Islands
MEDICINAL PREPS—22 cs, President Hayes, Honolulu; 28 cs, Maui, Hawaiian Islands
VETERINARY—3 bgs, Malolo, Hawaiian Islands; 6 pkgs, 2 cs, Maui, Hawaiian Islands
MILK POWDER—8 bbls, Maui, Hawaiian Islands
MOLASSES—2 bbls, Maui, Hilo
NAPHTHA—25 cs, 40 dms, Lubrico, Honolulu
OIL, COTTONSEED—1 cs, Malolo, Hawaiian Islands; (Maui), 55 cs, 2 dms, Hawaiian Islands; 1 cs, Naalehu
FLOOR—2 bxs, Maui, Hawaiian Islands; 21 bxs, 4 dms, Lubrico, Honolulu
FUEL — 2,500 bbls, Lubrico, Hilo/Honolulu/Kahului
HAIR—2 cs, Maui, Honolulu
HARNESS—2 bbls, Maui, Paulo
LINSEED—(Maui), 18 cs, Hawaiian Islands; 24 dms, Honolulu
LUBRICATING—(Lubrico), 58 bxs, 87 dms, 20 bbls, Kahului; 93 dms, Hilo; 295 dms, 200 cs, Honolulu; 26 dms, Paulo; 12 cs, 85 bbls, Maui, Hawaiian Islands
NEATSFOOT—1 cs, Stanley Dollar, Agana
SALAD—250 cs, Maui, Hawaiian Islands
SHINGLE—(Lubrico), 45 bxs, Hilo; 10 bxs, Honolulu
WHITE MINERAL—2 dms, Lubrico, Kahului
PAINT—(Maui), 56 cs, 12 kegs, Hawaiian Islands; 17 pkgs, Paia
BRONZE—1 cs, Maui, Hawaiian Islands
COLD WATER—(Maui), 21 bbls, 1 keg, Hawaiian Islands; 1 cs, Paia
GOLD—1 cs, Malolo, Hawaiian Islands
IN OIL—9 dms, 15 cs, Malolo, Hawaiian Islands; (Maui), 184 ctns, 19 dms, 4 cs, Hawaiian Islands; 23 pkgs, Kahului
LIQUID—8 cs, President Hayes, Honolulu; 1 cs, Malolo, Hawaiian Islands
MIXED—10 cs, Malolo, Hawaiian Islands; 4 cs, Maui, Hawaiian Islands
PAINT, PASTE—10 kgs, 4 cs, Maui, Hawaiian Islands
REMOVER—16 cs, Maui, Hawaiian Islands
PARAFFIN—10 bxs, Lubrico, Hilo
PASTE—20 cs, 50 pails, Malolo, Hawaiian Islands
PETROLATUM—3 dms, Lubrico, Honolulu
PETROLEUM GAS, LIQ—(Lubrico), 55 cyls, Kahului; 15 cyls, Paulo; 10 cyls, Maui, Hawaiian Islands
PRODUCTS—2 bxs, 6 dms, Lubrico, Honolulu
SOLVENT—(Lubrco), 27 dms, Honolulu; 5 cs, 5 dms, Kahului
POLISH, FURNITURE—3 bxs, Lubrico, Kahului
METAL—1 cs, Malolo, Hawaiian Islands; 2 cs, Maui, Honolulu
SHOE—8 ctns, Maui, Honolulu
POTASH SALTS—1 cs, Malolo, Hawaiian Islands; 1 keg, Maui, Hol
PROCAINE—2 crts, Malolo, Hawaiian Islands
PUTTY—5 pails, Malolo, Hawaiian Islands; 7 kegs, 3 cs, Maui, Hawaiian Islands
SALT—(Maui) 71 sks, 2 bls, Hawaiian Islands; 140 pkgs, Honolulu; 55 pkgs, Paia
SERUMS—2 cs, Maui, Hawaiian Islands
SHELLAC—2 cs, Malolo, Hawaiian Islands; 1 cs, Maui, Hawaiian Islands
SOAP—(West Ivis) 50cs, Fajardo; 200 cs, San Juan; 1 cs, Malolo, Hawaiian Islands; (Maui) 1 cs, 2 dms, Hawaiian Islands; 25 cs, Kaanapali
CHIPS—1 cs, Maui, Hawaiian Islands
LAUNDRY—(West Ivis) 100 cs, Guayama; 785 cs, San Juan; 50 cs, Aguadilla; 55 cs, Arecibo; 100 vs, Ensenada; 75 cs, Aguirre; (Maui) 33 pkgs, Hawaiian Islands; 4 cs, Paia
LIQUID—4 ctns, Malolo, Hawaiian Islands
MEDICINAL—7 cs, Malolo, Hawaiian Islands
NAPHTHA—30 cs, Maui, Paia
POWDER—(Maui) 60 ctns, Hawaiian Islands; 5 cs, Paia
SCOURING—(Maui) 2 cs, Hawaiian Islands; 20 ctns, Hilo
SOLVENT—30 ctns, Maui, Hawaiian Islands
TOILET—1 cs, West Ivis, San Juan; 22 cs, Malolo, Hawaiian Islands; 6 cs, Maui, Hawaiian Islands
SODA BISULPHITE—1 dm, Maui, Hawaiian Islands
SAL—10 kegs, Maui, Honolulu
SOYBEAN MEAL—20 sks, Maui, Kahului
SPRAY, STOCK—1 bx, Lubrico, Kahului
STAIN, WOOD—15 dms, 3 crts, Maui, Hawaiian Islands
STARCH—6 cs, Maui, Hawaiian Islands
CORN—12 cs, Maui, Hawaiian Islands
GLOSS—2 cs, Maui, Hawaiian Islands
LAUNDRY—2 bbls, Maui, Hawaiian Islands
SURGICAL DRESSINGS—5 cs, Malolo, Hawaiian Islands; (Maui) 12 pkgs, Honolulu; 6 pkgs, Paia
TANBARK—33 sks, Maui, Hawaiian Islands
TAR, PINE—1 cs, Stanley Dollar, Agana
TOILET PREPS—124 cs, Malolo, Hawaiian Islands; (Maui) 25 bxs, 1 bbl, Hawaiian Islands; 2 dms, Honolulu
TURPENTINE—1 cs, Malolo, Hawaiian Islands; 13 cs, Maui, Hawaiian Islands
VANILLA EXTRACT—(Maui) 3 ctns, Honolulu; 1 cs, Paia
VARNISH—11 cs, 4 dms, Maui, Hawaiian Islands
WASHING POWDER—3 pkgs, Malolo, Hawaiian Islands; 2 cs, Maui, Hawaiian Islands
WATER, MINERAL—2 cs, Maui, Hawaiian Islands
WATERPROOFING COMPOUND—2 bbls, Maui, Hawaiian Islands; (Lubrico) 10 bxs, Hilo; 14 bxs, Honolulu
WAX—4 sc, Maui, Hawaiian Islands
FLOOR—4 ctns, Malolo, Hawaiian Islands
WITCH HAZEL EXTRACT—1 bbl, Maui, Hawaiian Islands
YEAST—141 cs, Malolo, Hawaiian Islands; 147 cs, Maui, Hawaiian Islands

Clearance Dates

Lubrico, February 16; Malolo, February 18; Maui, February 21; President Hayes, February 17; Stanley Dollar, February 21; West Ivis, February 15.

Savannah Exports

COTTON LINTERS—(Delilian), 72 bls, Liverpool; 269 bls, Manchester; 73,153 bls, Monrosa, Genoa
OIL, PINE—416 gls, Athen, Sydney
OYSTER SHELLS—50 tons, Delilian, Manchester
ROSIN, GUM—(Wildwood), 497 bbls, Rotterdam; 147 bbls, Bremen; 349 bbls, Hamburg; (Monrosa), 96 bbls, Naples; 146 bbls, Leghorn; 1,491 bbls, Genoa; (Athen), 53 bbls, Brisbane; 375 bbls, Sydney; 120 bbls, Melbourne; 10 bbls, Perth
WOOD—(Athen), 25 bbls, Brisbane; 1,242 bbls, Melbourne; 1,793 bbls, Fremantle; 49 bbls, Delilian, Liverpool
TURPENTINE, GUM—3,770 gls, Delilian, Liverpool; (Athen), 4,591 gls, Brisbane; 29,508 gls, Sydney; 18,098 gls, Melbourne; 4,597 gls, Adelaide; 1,840 gls, Fremantle
WOOD—(Athen), 5,276 gls, Brisbane; 1,105 gls, Sydney

Clearance Dates

Athen, March 28; Delilian, March 30; Monrosa, March 29; Wildwood, March 28

Tampa Exports

INSECTICIDE—6 dms, Austvangen, Kingston
PERFUMERY—12 bxs, Florida, Havana
PHOSPHATE—7,494 tons, Oxelosund, Kallundborg; (Gonzenheim), 2,094 tons, Hamburg; 2,021 tons, Rotterdam
ROSIN, GUM—(Antinous), 98 bbls, Aalborg; 100 bbls, Leith; 100 bbls, Newcastle; 146 bbls, Hamburg; 180 bbls, Rotterdam

Clearance Dates

Antinous, March 29; Austvangen, March 28; Florida, April 2; Gonzenheim, April 4; Oxelosund, April 1

Shipments Between Domestic Ports

Corpus Christi Coast Trade

OIL, FUEL—1,655 bbls, F Q Barstow, Baytown
PETROLEUM, CRUDE—111,764 bbls, H H Rogers, Baytown; 145,619 bbls, William Rockefeller, Paytown; 142,767 bbls, W S Farish, Baytown; 114,729 bbls, Beacon, Baytown; 33,250 bbls, Federal, Baytown; 75,531 bbls, Walter Miller, Baytown

Galveston Coast Trade

ASPHALT, GILSONITE—700 sx, Henry R Mallory, New York; 900 sx, Medina, New York
BLACK, CARBON—1,200 sx, Henry R Mallory, New York; 1,800 sx, Medina, New York

Los Angeles Coast Trade

GASOLINE—117,500 bbls, Eastern Sun, Philadelphia; 55,336 bbls, Arizona, Seattle; 4,739 bbls, S & C No 41, San Diego; 52,178 bbls, Kekoskee, Seattle; 5,282 bbls, S & C No 2; San Diego
OIL, DIESEL—14,402 bbls, Huguenot, Seattle; 67 bbls, S & C No 41, San Diego
FUEL—30,753 bbls, El Segundo, Col River; 57,842 bbls, Huguenot, Seattle; 74,181 bbls, J C Fitzsimmons, Seattle
PETROLEUM, CRUDE — 113,000 bbls, F H Hillman, Richmond

San Francisco Coast Trade

ACETONE—3 dms, Mexican, Seattle
ACID—130 cbys, Munami, Portland
ACETYLSALICYLIC—2 ctns, Mexican, Seattle
CHROMIC—8 dms, Mexican, Seattle
CRESYLIC—39 dms, Peter Helms, Seattle
TARTARIC—15 tons, San Clemente, Baltimore
AGAR AGAR—105 bls, Virginia, New York
ALBUMEN, EGG, DUCK—54 cs, President Wilson, New York
ALUMINA SULPHATE—800 bgs, Wapama, Los Angeles
APRICOT KERNELS—150 sks, American, New York
BENZIN—2 dms, Point Brava, New Orleans
BONE MEAL—500 sks, Peter Helms, Tacoma
BRISTLES—5 cs, San Clemente, New York; 6 cs, Pennsylvania, New York
CAMPHOR, REFD — 11 cs, Virginian, New York
CARBON BISULPHIDE—20 dms, Point Brava, New Orleans
CASEIN—492 sks, Virginian, New York
CASSIA—2 bls, 2 cs, President Wilson, New York; 400 bls, San Clemente, Baltimore
BUDS—25 bls, President Wilson, New York
CEMENT, ROOFING—100 pkgs, Peter Helms, Seattle
CHILLIES—(Virginian), 212 bgs, New York; 56 bgs, Boston
CHLORINE BLEACH, LIQ—500 cs, Point Brava, Tampa; 1,200 ctns, American, New York; 14 tons, J L Luckenbach, Boston; 18 tons, Pennsylvania, New York
COCONUT, DESIC—(President Wilson), 5,985 cs, New York; 275 cs, Los Angeles; 495 cs, J L Luckenbach, Philadelphia; 651 cs, Virginian, New York
CREAM TARTAR—84 bbls, Virginian, Boston
DENTIFRICE—2 cs, Mexican, Seattle
DRUGGISTS' SUNDRIES—5 cs, Point Brava, New York; 7 cs, American, Los Angeles; 6 cs, Mexican, Seattle
FORMALDEHYDE—1 bbl, President Wilson, Los Angeles
GASOLINE—(Cathwood), 69,000 bbls, Portland; 6,000 bbls, Astoria
GINGER ROOT—30 bgs, Virginian, New York
GLUE, DRY—20 tons, President Wilson, New York; 1 bg Mexican, Tacoma; 220 bgs, Virginian, New York
GUM, COPAL—65 bskts, President Wilson, Los Angeles
HOPS—9 tons, Pennsylvanian, New York
HYDROGEN PEROXIDE—50 ctns, Mexican, Seattle
INFUSORIAL EARTH—45 tons, J L Luckenbach, Philadelphia; 1,100 bgs, Virgilan, Philadelphia
LIME—15 tons, Jacox, Seattle; (Peter Helms) 500 sks, Seattle; 600 sks, Portland; 1,800 sks, Munami, Portland; 600 sks, Eleanor Christenson, Portland
LINSEED MEAL—700 sks, Peter Helms, Portland
LITHARGE—60 bbls, American, New York
MAGNESIA CARBONATE—600 bgs, Virginian, New York
MAGNESITE—50 tons, San Clemente, Baltimore
MEDICINAL PREPS—(President Wilson), 2 cs, New York; 37 cs, Los Angeles
MENTHOL—35 cs, Virginian, New York
MILK POWDER—180 bbls, Point Brava, Tampa; 400 bbls, American, New York
OIL—(Peter Helms), 600 pkgs, Tacoma; 800 pkgs, Portland; 437 bbls, Munami, Willbridge
CAMPHOR—5 dms, Virginian, New York
FUEL—1,000 bbls, Cathwood, Astoria
LUBRICATING—1,200 bbls, Warwick, Los Angeles; 1 ctn, Mexican, Tacoma
OLIVE—5 dms, President Wilson, Boston
SALAD—75 pkgs, Charles L Wheeler, jr, Portland
PAINT—6 dms, American Los Angeles
PETROLEUM PRODUCTS—24 tons, Jacox, Seattle
SALT—(Peter Helms), 500 pkgs, Tacoma; 359 tons, 6,300 pkgs, Seattle; 2,440 pkgs, Portland; 480 sks, Munami, Portland
SESAME SEED—123 pkgs, President Wilson, Los Angeles
SHELLAC, DRY—1 cs, Mexican, Seattle
SOAP—23 tons, Jacox, Seattle; 1 ctn, Mexican, Seattle
CHIPS—830 bgs, Wapama, Los Angeles
SODA SILICATE—22 tons, Jacox, Olympia; 220 sks, Charles L Wheeler, Jr, Long View; 50 dms, Peter Helms, Seattle; 220 sks, Munami, Long View; 63 dms, Eleanor Christenson, Portland
SOLVENT—61 dms, Virginian, New York
SPRAY, TREE—375 dms, Charles L Wheeler, Jr, Portland; 125 dms, Peter Helms, Portland; 450 dms, Munami, Portland
SULPHUR—40 tons, Jacox, Everett
SURGICAL DRESSINGS—2 cs, President Wilson, Los Angeles; 3 ctns, Mexican, Seattle
TOILET PREPS—(Mexican), 15 ctns, Seattle; 10 ctns, Tacoma
VERMIN EXTERMINATOR—5 pkgs, Point Brava, Houston
WASHING POWDER—700 pkgs, Peter Helms, Seattle; 4 cs, President Wilson, Los Angeles
WAX—600 ctns, Peter Helms, Seattle; (Virginian), 150 cs, New York; 25 cs, Boston

Recent Charters

PETROLEUM—7,400 tons, U S S S Gulflight, clean, and gas oil, Houston/Baltimore, 17c, late April
3,000 tons, Nor M S Binta, clean, Constanza/London/White Booth Rds, 8s, April
2,000 tons, Nor M S Binta, clean, Constanza/White Rds, 7s 3d, April
2,000 tons, Nor M S Binta, Constanza/London, 7s, April
6,000 tons, Ital Sanandrea, clean, Batoum/Hamburg, 7s, April
7,600 tons, Ital S S Olterra, gas/fuel, Constanza/2 ports Western Mediterranean, 5s 3d, March
10,500 tons, Ital M S Teresa Odero, dirty, Batoum/Copenhagen and Nynashamn, 9s, April
5,000 tons, Ital S S Rica Sicula, fuel, Constanza/Dakar (2 trips), 7s 6d, April
6,800 tons, M S ——, lubricating oil, Gulf/U K/Continent, Havre/Hamburg, lump sum equal to 12s 6d, April
7,500 tons, Ital S S Bacacin Padre, fuel, Constanza/Teneriffe, 6s, April
11,000 tons, Nor M S Thorshavn, time charter, Gulf/Montreal trade, 3s 6d, April
13,000 tons, Br M S Athel, dirty, California/Japan, 2 trips, 10s, May
11,000 tons, Hr M S Laurelwood, clean, California/Hamburg, 14s 9d, May 15-31
9,000 tons, Dan M S Aase Maersk, dirty, Gulf/Teneriffe, 6s 9d, May

Imports Detained by U.S. At the Port of New York

Detentions made at the Port of New York in the week ended April 12, on determinations by the Food and Drug Administration that products offered for import were adulterated or misbranded under the Federal food and drug act or did not comply with other customs regulations, included the following articles for the reasons stated:—

Cantharides, 15 cases, not U.S.P.
Caraway seed, 1,300 bags, filthy.
Cassia oil, 5 drums, not U.S.P.
Codliver oil, 25 drums, restricted use.
Cumin seed, 25 bags, excessive ash.
Cumin seed, 154 bags, filthy.
Fennel seed, 250 bags, filthy.
Medicinal preparation, 1 case, false therapeutic claims, alcohol not declared.
Medicinal preparations, 11 cases, false therapeutic claims.
Nux vomica, 70 bags, deficient in alkaloids.
Olive oil, 20 cases, short volume.
Poppyseed, 100 bags, filthy.
Scammony root, 196 bags, partly moldy.
Squill, red, 70 bags, restricted use.
Stramonium, 20 bales, excessive acid-insoluble ash.

Detentions at San Francisco

Detentions of articles offered for importation at San Francisco during the week April 8, included, because of findings of the Food and Drug Administration, the following, for the reasons stated:—

Cereal, 23 cases, false therapeutic claims.

Animal, Vegetable and Fish Oils

(Continued from page 44)

Chicago Fatty Acids

CHICAGO, April 14, 1933.

Fatty acids are moderately firm, with activity comparatively limited. There is little evidence that sellers are willing to do business on any considerable scale much lower in price, while buyers are not overly anxious to place orders for large quantities of material at these levels. Still, the undertone at the present time is quite firm, with raw materials reported showing firmness. Total movement is restricted. Special cottonseed materials continue quiet, as do red oils and stearic acids, on limited buying.

Ruling prices are:—

FATTY ACIDS—Corn oil, double distilled, 3½c. to 3¾c. per pound, tankcar; 3¾c. to 4c., barrels, car lots; 4c. to 4¼c., barrels, less than car lots; coconut oil, double distilled, 4½c. to 4¾c. per pound, tankcar, nominal; 4¾c. to 5c., barrels, car lots; 5c. to 5¼c., barrels, less than car lots; cottonseed oil, double distilled, 3½c. to 3¾c. per pound, tankcar; 3¾c. to 4c., barrels, car lots; 4c. to 4¼c., barrels, less than car lots; settled cottonseed soap stock, 60-62 percent basis, 1⅜c. to 1½c.; boiled down soap stock, 65 percent basis, 1¾c. to 2c.; cottonseed foots, 50 percent basis, ¾c.

STEARIC ACID—Distilled, single press, 7½c. per pound; double press, 8c. to 8½c.; triple press, bags, 10¾c. to 11¼c.

RED OILS — Distilled or saponified, 5⅞c. per pound, drum lots; 6⅜c. to 6⅞c., barrels.

Cuba Increases Oleo Oil Duty

As a result of recent official customs classification, the Cuban import duty on oleo oil has been heavily increased, according to a report to the Department of Commerce from the commercial attache at Havana. A treasury circular, promulgated April 4, reclassifies oleo oil from its former classification as refined tallow, dutiable at $2.40 per 100 gross kilos, to a new classification as oleomargarin, dutiable at $40 per 100 kilos. In the new classification, oleo oil is exempt from surtax, and has a tare allowance of 12 percent of the gross weight, if packed in ordinary boxes, tierces, or cans, or 35 percent of gross weight, if packed in other containers of wood, glass, or tin, provided the latter does not exceed the correct tare.

General American Tank Changes Corporate Name

The stockholders of the General American Tank Car Company at a meeting April 11 approved a proposal of the directors to change the name of the concern to the General American Transportation Company, which latter was regarded as more aptly describing the business of the company. At the same meeting all directors were re-elected and authority was given the directors to use shares of stock, now in the treasury, for retirement or general corporate purposes. The directors reported that net profit for the quarter ended March 31, 1933, amounted to $379,000, after charges and taxes, being equal to 50 cents a share on 751,638 no-par capital shares.

Personal Paragraphs

Floyd J. Huff, of the Regal Oil & Refining Company, Calgary, Canada, has been elected chairman of the Calgary branch of the Canadian Manufacturers' Association.

P. E. Harth, general manager, of the National Pigments & Chemical Company, producers of barytes, St. Louis, spent a few days in New York during the week of April 10.

Edward D. Levy, formerly president of the Pierce Petroleum Company, New York City, has been elected as chairman of the board of directors of the Fiske Rubber Company.

John McNerney has been elected a director of the Libbey-Owen-Ford Glass Company, his election following approval by the stockholders of a proposal to increase the board membership to sixteen from fifteen.

Cottonseed, Oil, Cake, and Meal

Chicago Cottonseed Oil

(Continued from page 45)

Southeast; while in Texas and Oklahoma it is quoted at 2⅝c. Good, off-Summer yellow fig oil is quoted at 3¾c., delivered, Chicago. Refined, edible oil is quoted at 5½c. to 5¾c. per pound, barrels, car lots; and 6c., barrels, less than car lots.

Hull Cottonseed Oil Prices

Quotations on cottonseed oil in barrels in Hull, England, last week were:—

	Refined. Per cwt. s.	d.	Egyptian crude. Per cwt. s.	d.
Saturday	20	6	18	0
Monday	20	0	17	6
Tuesday	20	0	17	6
Wednesday	20	0	17	6
Thursday	20	0	17	6
*Friday	..	..	..	..

* Holiday.

Fertilizer Materials

(Continued from page 48)

San Francisco Fertilizers

SAN FRANCISCO, Apr. 10, 1933.

The lack of further buying has left the fertilizer materials market in this section rather poor in tone, and taken as a whole, sellers were finding it difficult to make progress last week. This situation, however, has been expected, now that the important buying for the season has been done, but the total seasonal volume of tonnage this year is said to be below what growers took into consumption by this time last year. Particularly in this thought to be true in the case of sulphate of ammonia, more especially as applied to the domestic article. As regards other materials, tankage, blood and fish meals have been in fair demand all season, and at times packing houses have reported scarcity in their by-products supplies.

Ruling prices are:—

NITRATE OF SODA.—100 pound bags, $28.50 per ton ex-warehouse, Oakland, or $27.50 per ton, ex-vessel San Francisco; 200 pound bags, $27.55 per ton, ex-warehouse Oakland, or $26.80 per ton, ex-vessel San Francisco; bulk lots quoted at $26.75 per ton, ex-warehouse Oakland, or $25.50 per ton, ex-vessel San Francisco.

SULPHATE OF AMMONIA.—Domestic in bulk, quoted at $25.50 per ton; bags, $26.50 per ton, delivered California ports for prompt shipment. Japanese last reported available at $24 per ton, in bags, c.i.f. Pacific Coast ports for immediate shipment.

SUPERPHOSPHATE. — Quoted nominally at 60c. per unit, c.i.f. Pacific Coast ports for shipment from Japan, with domestic material in Southern California available at a comparative price. Bulk lots quoted lower at 50c. per unit.

FISH MEALS.—Locally manufactured, quoted at $24 per ton, f.o.b. cars, San Francisco for prompt shipment, with second grade offal meal quoted at $19.50 per ton, f.o.b. cars, San Francisco; Monterey sardine meal quoted at $25 per ton, f.o.b. cars, Monterey; Japanese sardine meal quoted at $24 per ton, April-May shipment, c.i.f. Pacific Coast ports.

TANKAGE.—Weaker at $1.65 and 10c. per unit-ton, f.o.b. cars, San Francisco; Australian and New Zealand material reported available at the same figures.

BONE MEAL.—Domestic steamed meal quoted at $20 to $24 per ton, f.o.b. cars, San Francisco.

BLOOD MEAL.—Recent sales at near $1.55 per unit are reported, with stocks still fairly scarce. Argentine and New Zealand material quoted nominally at the same figure, c.i.f. Pacific Coast ports.

Fertilizer Freights Cut

The New York public service commission has approved reduced rates of the Delaware & Northern Railroad on fertilizer materials, as follows:—Manufactured fertilizer, fish, tankage, or scrap, dry, common, not ground or pulverized, or acid fish scrap, and guano, in straight or mixed c. l. min. wt. 30,000 lbs.; also nitrate of soda, in straight c. l. min. wt. 40,000 lbs., or in mixed c. l. with above listed articles, min. wt. 30,000 lbs., proportion of nitrate of soda in mixed c. l. not to exceed 20 percent of total shipment, from Arkville and East Branch to all stations on its line, $1 per net ton; reductions, varying from 10 cents to $1 per net ton; effective April 30.

Chile Developing Sulphur Industry

LONDON, Apr. 6, 1933.

Increasing interest is being shown in the development of the Chilean sulphur deposits, especially since additional markets have been opened up in Europe and on the East Coast of South America. The Chilean Ministry of Production states that £200,000 has recently been invested by national and foreign enterprises in new sulphur mines in northern and southern Chile.

Italy Admits Nitrate Free

Italy will admit 10,500 metric tons of crude nitrate of soda free of duty during the first six months of this year. The ministerial decree establishing this quota provides that imported nitrate in excess of the amount fixed will be dutiable at the regular rate.

Nitrate of Soda Offered by Army

The chief of the ordnance department of the United States Army, stationed at Washington, has asked for bids until April 20, procurement No. 3, for the sale of 4,340 tons of nitrate of soda.

Petroleum Production Increased in January

Production of crude petroleum in the United States during January was 63,998,000 barrels, against 58,044,000 barrels in December and 66,884,000 barrels in January, 1932, according to reports received by the United States Bureau of Mines. The January output of motor fuel was 30,998,000 barrels, against 31,753,000 barrels in December, while domestic consumption in January was 26,442,000 barrels, against 27,191,000 barrels in December. Stocks of gasoline on hand at the end of January totaled 51,712,000 barrels, against 49,665,000 barrels in December.

Details of production, domestic demand and stocks on hand of both crude and refined petroleum during January and a comparison with December follow:—

	Gallons		
	January.	December.	Jan., 1932.
Crude petroleum—			
Total production	63,998,000	58,044,000	66,884,000
Daily average production	2,064,000	1,872,000	2,158,000
Foreign and domestic runs to stills	66,093,000	65,998,000	68,715,000
Pipeline, tankfarm and refinery stock	335,351,000	338,718,000	369,034,000
Motor fuels—			
Production	30,998,000	31,753,000	33,487,000
Domestic demand	26,442,000	27,191,000	26,063,000
Stocks on hand	51,712,000	49,671,000	56,598,000
Kerosene—			
Production	4,363,000	4,097,000	3,798,000
Domestic demand	3,656,000	3,149,000	2,612,000
Stocks on hand	4,794,000	4,974,000	5,304,000
Lubricants—			
Production	1,827,000	1,625,000	2,092,000
Domestic demand	859,000	1,042,000	1,413,000
Stocks on hand	8,796,000	8,375,000	9,551,000
Gas and fuel oils—			
Production	25,463,000	24,471,000	26,460,000
Stocks on hand	127,359,000	129,971,000	132,960,000
	Pounds		
Wax—			
Production	26,680,000	35,000,000	43,680,000
Domestic demand	22,157,000	33,420,000	18,435,000
Stocks on hand	160,240,000	163,628,000	178,082,000

Superphosphate Production, Shipments and Stocks: 1932

Production of bulk superphosphate in 1932 was 1,767,660 short tons, compared with 2,744,528 tons in 1931 and 4,595,096 tons in 1930, according to a report of the Bureau of Census based on data received from 87 manufacturers operating 158 plants. Stocks on hand at the end of 1932 were 1,076,520 tons of bulk superphosphate and 341,727 tons of base and mixed goods, compared with 1,313,522 tons of bulk and 521,509 tons of base and mixed goods on hand at the end of 1931. Shipments in 1932 totaled 2,425,749 tons of bulk goods and 876,012 tons of base and mixed, against 2,005,820 tons of bulk and 427,035 tons of base and mixed goods in 1931. Details of production, shipments and stocks on hand for 1932, and a comparison with 1931, follow:—

Short tons

	Production and stocks: Produced: Bulk superphosphate. Northern district.	Southern district.	Base and mixed goods. Northern district.	Southern district.	Received from other acidulators.* (Including inter-company transfers). Northern district.	Southern district.	Shipments: Bulk superphosphates: Total U. S.	To mixers: Northern district.	Southern district.	To other acidulators (including inter-company transfers). Northern district.	Southern district.	To consumers: Northern district.	Southern district.	Base and mixed goods. Northern district.	Southern district.	Stocks: Bulk superphosphate. Northern district.	Southern district.	Base and mixed goods. Northern district.	Southern district.
1932.																			
Jan.	125,949	89,070	4,745	4,089	14,716	16,352	126,961	46,322	12,311	11,089	11,477	9,750	8,429	5,367	22,206	546,342	795,170	323,324	301,890
Feb.	115,452	87,924	4,178	9,249	15,699	3,437	183,294	47,880	27,136	8,940	1,796	18,418	24,799	19,027	35,298	549,506	737,704	361,702	351,837
March	105,776	64,674	2,152	5,760	14,388	3,114	384,110	48,261	56,462	5,275	5,079	52,039	78,704	66,094	72,196	531,223	656,595	330,812	314,235
April	99,699	47,182	2,120	8,684	14,130	4,443	707,458	73,521	70,372	11,733	5,376	98,859	156,258	142,219	149,120	441,731	453,965	210,343	192,879
May	76,110	10,090	1,116	504	14,872	1,737	267,640	26,347	14,278	8,561	2,382	40,667	28,220	102,986	44,199	443,727	413,369	122,096	159,131
June	47,627	13,912	178	13	6,602	936	62,478	12,305	1,809	3,989	1,971	16,988	4,510	13,731	7,175	441,955	413,580	124,985	154,011
July	52,224	17,589	4,836	40	2,309	669	60,473	30,589	759	7,982	1,087	8,985	1,789	7,647	1,635	427,657	424,930	143,451	144,882
Aug.	74,583	38,336	5,706	1,877	6,870	480	76,871	29,200	9,639	11,281	1,038	9,176	3,099	9,515	3,923	427,020	441,637	172,412	151,482
Sept.	68,907	48,268	3,438	2,809	5,477	2,555	228,909	22,804	13,608	18,907	2,090	72,549	8,230	84,755	5,876	379,213	473,822	98,498	144,062
Oct.	71,857	78,161	1,839	5,537	6,537	6,524	151,620	34,801	13,371	4,663	8,561	30,783	16,555	24,845	18,041	368,710	505,332	94,376	145,982
Nov.	104,413	105,063	2,369	6,423	9,403	6,016	76,239	23,271	8,845	7,559	4,096	6,762	6,266	5,060	14,380	411,250	568,653	125,075	165,727
Dec.	121,704	103,090	469	2,488	6,678	12,750	99,696	39,099	12,389	15,554	4,045	4,166	3,726	5,956	14,761	439,012	637,508	161,377	180,350
Tot., yr.	1,064,301	703,359	33,146	47,413	117,591	59,013	2,425,749	434,500	240,979	115,533	48,998	369,142	340,585	487,202	388,810	.....	.....	.....	.....
1931.																			
Jan.	187,116	162,494	.....	.....	.....	.....	54,551	.....	.....	.....	.....	31,979	22,572	.....	.....	554,852	973,770	500,772	628,477
Feb.	164,272	128,698	.....	.....	.....	.....	65,748	.....	.....	.....	.....	29,807	35,941	.....	.....	542,081	920,130	546,606	625,941
March	182,562	95,241	.....	.....	.....	.....	241,924	.....	.....	.....	.....	93,742	148,182	.....	.....	514,191	710,825	384,085	438,908
April	156,201	88,730	.....	.....	.....	.....	361,841	.....	.....	.....	.....	188,772	173,069	.....	.....	384,107	486,870	225,143	179,727
May	137,320	86,946	10,907	1,555	11,326	3,920	324,772	43,348	11,650	10,005	6,560	45,692	32,727	109,802	64,988	391,312	499,837	168,644	143,256
June	129,324	48,748	15,210	2,476	19,200	2,957	103,754	31,875	4,937	11,178	981	13,438	7,549	24,144	9,652	447,638	528,336	195,417	145,819
July	121,382	74,207	9,885	.....	19,665	9,656	112,665	43,858	4,145	17,079	7,770	6,091	14,508	14,939	4,275	464,404	568,632	247,616	158,688
Aug.	123,943	86,346	6,267	1,272	15,971	12,475	98,056	37,654	4,773	17,030	4,560	8,237	6,024	13,084	6,694	492,036	628,783	290,160	176,579
Sept.	89,023	84,248	1,295	270	8,863	6,905	257,133	40,138	11,645	13,465	5,792	78,494	9,120	86,803	11,676	482,062	671,738	180,415	186,814
Oct.	90,291	97,347	4,253	2,138	13,470	15,590	168,702	41,709	8,377	11,518	5,540	36,214	23,217	23,338	18,789	473,966	731,164	183,746	186,540
Nov.	100,202	79,203	1,789	2,876	10,316	17,389	93,033	30,304	8,914	15,327	10,032	3,165	8,497	5,353	11,441	507,366	765,365	208,504	212,923
Dec.	133,584	97,100	5,712	3,046	12,316	12,756	123,641	43,271	14,410	17,069	13,206	3,870	9,758	7,925	14,132	528,493	785,029	266,854	254,655
Tot., yr.	1,615,220	1,129,308	55,318	13,633	111,127	81,648	2,005,820	312,157	68,851	112,671	54,441	539,501	491,164	285,368	141,647	.....	.....	.....	.....

* Includes both bulk superphosphate and base and mixed goods.

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Positions Wanted

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YOUNG MAN, desires position laboratory technician; thoroughly experienced chemical manipulative procedure. Efficient; capable of readily learning and practicing any new procedure. My efficiency and experience are yours for low salary. Highest references. BOX 684, Oil, Paint and Drug Reporter.

CHEMIST—Industrial, research, consultant experience in colloidal chemistry. Preparation, cosmetic lines, emulsions, synthetic emulsifying agents, waxes, resins, rubless wax polishes, shoe dressings. Author chemical articles. Practical, original, efficient. Salary nominal. Interview solicited. BOX 692, Oil, Paint and Drug Reporter.

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Dividends Reported Since Last Week's Issue

	Stock.	Class.	Amount.	Payable.	Of record.
Archer-Daniels-Midland Company...	Pfd.	Q.	$1.75	May 1	April 20
British Controlled Oilfields, Ltd....	Pfd.	..	3%	.....	.....
Consolidated Oil Corporation.....	Pfd.	Q.	$2.00	May 15	May 1
Continental Can Company.....	Com.	Q.	50c.	May 15	May 1
I. G. Farbenindustrie.....	Com.	..	7%	.....	.....
MacBeth Evans Glass Company.....	Com.	Q.	62½c.	Mar. 31	.....
Procter & Gamble Company.....	Com.	Q.	37½c.	May 15	April 25
Smith Agricultural Chemical Co...	Pfd.	Q.	$1.50	May 1	April 20
Unilver, Ltd.....	Com.	Final	36c. Dutch	.....	.....
Unilver, N. V.....	Com.	Final	30 florins	.....	.....
Union Oil Company of California...	Com.	Q.	25c.	May 10	April 20
Dividends Omitted					
Colgate-Palmolive-Peet Company...	Com.	Q.	25c.	April 20	.....

Personal Paragraphs

A. P. Axtell, sales manager, Chilean Nitrate Sales Company, this city, is on a business trip through the South.

A. J. Hardenforf, Denver, was awarded a contract to construct a $300,000 pipeline between Conroe and Houston, Texas, the line to carry oil from the Conroe field to the ship channel at Houston. The name of owner was withheld.

A. A. Wasserscheid, manager of the New York branch of the Mallinckrodt Chemical Works, has been elected a trustee of the College of Pharmacy of the City of New York, Columbia University. His term is for three years from July 1, 1933.

Kenneth G. MacKay, of the Gulf Refining Company, was in charge of the program at the thirty-sixth annual meeting of the Boston Credit Men's Association, held April 11 in connection with a dinner at the restaurant of the Boston Chamber of Commerce.

Samuel C. Henry, secretary of the National Association of Retail Druggists, has refused to resign as requested by John Goode, president of the association. Mr. Goode charges negligence in the conduct of the secretary's office. Definite action in line with his request is expected at an early date.

Frank N. Bancroft, Denver attorney, has been elected president of the Johnson Ranch Royalty Company, Inc., relieving Ed. R. Mayer. Other officers are:—Walter S. Reed, vice-president; Dr. Harry W. Wilson, secretary. Bancroft is treasurer and was also elected president of the Rock Creek Oil Corporation, a related concern.

George W. Strake, discoverer of the Conroe oil field, Texas, and owner of the Strake Oil Corporation and the Strake Petroleum, Inc., was made defendant in a suit for $1,000,000, the plaintiffs being K. E. Choate, M. H. LaSulle and C. S. Kinney, who are claiming that Strake refuses to recognize their exploration methods were the prime cause for the field's discovery.

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